

**IN THE UNITED STATES DISTRICT COURT FOR THE  
EASTERN DISTRICT OF VIRGINIA  
NORFOLK DIVISION**

**Latasha Holloway, et al.,**

**Plaintiffs,**

**v.**

**City of Virginia Beach, et al.,**

**Defendants.**

**Civil Action No. 2:18-cv-0069**

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**Defendants' Memorandum of Law in Support of Motion for Summary Judgment**

**EXHIBIT THREE**

Deposition Transcript of Anthony E. Fairfax

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF VIRGINIA  
NORFOLK DIVISION

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LATASHA HOLLOWAY and GEORGIA ALLEN,

Plaintiffs,

CIVIL ACTION NO.  
2:18-cv-00069

v.

CITY OF VIRGINIA BEACH, et al.,

Defendants.

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DEPOSITION UPON ORAL EXAMINATION  
OF ANTHONY E. FAIRFAX,  
TAKEN ON BEHALF OF THE DEFENDANTS

Virginia Beach, Virginia

September 24, 2019

Appearances:

CAMPAIGN LEGAL CENTER  
By: ANNABELLE HARLESS, ESQUIRE  
J. GERALD HEBERT, ESQUIRE  
Counsel for the Plaintiffs

OFFICE OF THE VIRGINIA BEACH CITY ATTORNEY  
By: CHRISTOPHER S. BOYNTON, ESQUIRE  
JOSEPH M. KURT, ESQUIRE  
Counsel for the Defendants

Also Present: Tim Koehl, Videographer

1                   I N D E X

2 DEPONENT                   EXAMINATION BY                   PAGE  
3 Anthony E. Fairfax     Mr. Boynton                   3  
4

5                   EXHIBITS  
6

7 NO.           DESCRIPTION                   PAGE  
8 1           Amended Complaint                   5  
9 2           Expert Report of Anthony E. Fairfax                   3  
10              July 15, 2019  
11 3           Report of Peter A. Morrison, Ph.D.                   3  
12 4           Expert Report of Anthony E. Fairfax,  
13              Response to Peter Morrison's Report,  
14              8/26/19  
15 5           Curriculum Vitae of Anthony E. Fairfax 11  
16  
17  
18  
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1                   Deposition upon oral examination of  
2 ANTHONY E. FAIRFAX, taken on behalf of the  
3 Defendants before Kathleen Beard Adams, CCR, RPR,  
4 CRR, a Notary Public for the Commonwealth of  
5 Virginia at large, commencing at 2:07 p.m. on  
6 September 24, 2019, at the Office of the Virginia  
7 Beach City Attorney, Building 1, 2401 Courthouse  
8 Drive, Virginia Beach, Virginia; and this in  
9 accordance with the Federal Rules of Civil  
10 Procedure.

11                   - - - - -  
12                   (Fairfax Exhibits 1 through 4 were  
13 marked for identification.)  
14                   THE VIDEOGRAPHER: We are now on record.  
15 The time is 2:07 p.m. To -- today's date is  
16 September 24th, 2019. This is the videotaped  
17 deposition of Anthony Fairfax being held at 2401  
18 Courthouse Drive, Virginia Beach, Virginia, in the  
19 matter of Latasha Holloway, et al. versus the City  
20 of Virginia Beach, et al., Civil Action No.  
21 2:18-cv-0069, pending in the United States District  
22 Court for the Eastern District of Virginia, Norfolk  
23 Division. This deposition is being taken on behalf  
24 of the defendant.

25                   My name is Tim Koehl. I'm with Legal

1 Video Solutions. I'm the video specialist for the  
2 deposition.

3 The court reporter is Kathy Adams of  
4 Adams Harris Reporting.

5 Will counsel please I -- introduce  
6 yourselves for the record and state whom you  
7 represent.

8 MR. BOYNTON: Mr. Fairfax, my name is  
9 Chris Boynton and together with my colleague, Joe  
10 Kurt to my right, we represent the City of Virginia  
11 Beach and all the other defendants in this matter.

12 THE DEPONENT: Okay.

13 MS. HARLESS: Annabelle Harless,  
14 representing the plaintiffs and the witness Mr.  
15 Fairfax today from the Campaign Legal Center in  
16 Chicago.

17 MR. HEBERT: And I'm Gerald Hebert, also  
18 counsel for the plaintiffs.

19 MR. KURT: And I'm Joe Kurt and, as  
20 Chris mentioned, I represent the defendants.

21 THE VIDEOGRAPHER: Will you please swear  
22 in the witness.

23 (The deponent was sworn.)

24

25

1                   ANTHONY E. FAIRFAX was sworn and deposed  
2 on behalf of the Defendants as follows:

3                   EXAMINATION

4 BY MR. BOYNTON:

14:10:08 5           Q.     Mr. Fairfax, good afternoon.

6           A.     Good afternoon.

7           Q.     My name is Chris Boynton, as we've just  
8 established, and I -- I am representing the  
9 defendants in this matter. And I'm -- I'm sure  
14:10:17 10 you've been deposed before, but if we could go  
11 through a couple of ground rules --

12          A.     Sure.

13          Q.     -- that hopefully will simplify things.

14          A.     Sure.

14:10:25 15          Q.     First of all, I am sure at some point I  
16 will ask a question that is unclear in some way, and  
17 if you'll speak up I'll be happy to clarify.

18                 Secondly, if you will allow me to  
19 complete my questions, and then I'll allow you to  
14:10:35 20 complete your answers, so that the court reporter  
21 does not have to jump back and forth any more than  
22 necessary as to our relative voices.

23                 Third, court reporters cannot take down  
24 gestures and nods, and the infamous uh-huh versus  
14:10:52 25 uh-uh does not translate very well in a transcript.

1 So I'd ask you to respond verbally and with yeses  
2 and nos when the an -- when the questions calls for  
3 it.

4 And, finally, if you have given  
14:11:01 5 testimony and then at some point later in the  
6 deposition it becomes clear to you that you've given  
7 incomplete or inaccurate testimony, just speak up.  
8 We'll clarify the record. We'll go from there.

9 Does that all sound good to you, sir?

14:11:10 10 A. It sounds excellent.

11 Q. Out -- outstanding. Thank you.

12 Please tell us your -- your full name.

13 A. Anthony Edward Fairfax.

14 Q. And, sir, where is your residence?

14:11:18 15 A. Hampton, Virginia.

16 Q. Okay. And what -- where are you  
17 presently employed?

18 A. I am a demographic and mapping  
19 consultant. I'm the principal consultant and CEO of  
14:11:31 20 CensusChannel, LLC. It's my own company.

21 Q. And what is the loc -- the business  
22 address of that?

23 A. The mailing address is 16 Castle Haven  
24 Road, Hampton, Virginia, 23666. I have a co-op  
14:11:45 25 office space at a different location where I can

1 share offices.

2 Q. But also within Hampton?

3 A. Yes.

4 Q. And what is your residence address?

14:11:53 5 A. Sorry. 16 Castle Haven Road, Hampton,  
6 Virginia, 23666.

7 Q. Fair enough. Thank you, sir.

8 I'm going to show you a document that's  
9 not been marked and hopefully we won't need to.

14:12:06 10 I'll represent to you that it is the initial  
11 plaintiffs' expert witness disclosures that were  
12 transmitted to us in this case. I have highlighted  
13 the piece of it that references you. I'd just ask  
14 you to review that for a moment.

14:12:23 15 A. (Moved head up and down.)

16 Q. It provides only cursory --

17 A. Uh-huh.

18 Q. -- identifying information.

19 A. Looks correct.

14:12:28 20 Q. Okay. And you don't see anything  
21 inaccurate --

22 A. No.

23 Q. -- in that document?

24 A. No. No.

14:12:33 25 Q. Okay. Fair enough.

1 Now, from that document there is a -- a  
2 -- a -- a web link to censuschannel.net that  
3 identifies some further particulars about you  
4 personally.

14:12:44 5 A. Yeah.

6 Q. I --

7 A. It should be Censuschannel --

8 Q. Yeah.

9 A. -- com, but --

14:12:47 10 Q. I'm sorry.

11 A. Is it -- it -- is it dot net --

12 Q. I --

13 A. -- that's included?

14 Q. It -- it says dot net.

14:12:51 15 A. That's -- that's --

16 Q. And I clicked through dot -- I actually  
17 typed in this morning dot net, that exact address,  
18 and I will represent to you that this document came  
19 up.

14:13:00 20 A. Yeah. I --

21 Q. So again I'll ask you to take a look at  
22 it. And, again, it's very basic background  
23 information, but I just want to make sure that it's  
24 accurate.

14:13:08 25 A. Sure. That's -- that's an old website

1       that I used probably about seven or eight years ago.

2       The dot com is the one that -- that I currently use  
3       for business.

4           Q.     So you believe there's a more recent --

14: 13: 22

5           A.     Yes.   Yes.

6           Q.     And what is the web address for that?

7           A.     Censuschannel.com.

8           Q.     But they're otherwise the same?

9           A.     Censuschannel -- yes.

14: 13: 30

10       Censuschannel.com.   Yes.

11           Q.     And I'll -- I'm -- I guess it would help  
12       if I actually put the web address that we were  
13       provided in front of you.   And I'm referring back  
14       then to the initial disclosure document that you  
14: 13: 40      looked at and confirmed was accurate a moment ago.

16           A.     I missed the -- I missed the web  
17       address.   Yeah, it -- it's the dot com.

18           Q.     Okay.   Is --

19           A.     My apologies.

14: 13: 51

20           Q.     Is it otherwise that exact link?

21           A.     Censuschannel.com is the main website.  
22       I can't give you where it specifically goes to my  
23       bio --

24           Q.     Okay.

14: 14: 01

25           A.     -- but censuschannel.com.   And you can

1 actually find the bio. Once you click on About my  
2 name will show up.

3 Q. What -- what I will do so as to not  
4 delay the deposition is -- let's go ahead and mark  
5 this exhibit as Exhibit 5 because we premarked four  
6 others. And I say this exhibit. It's the -- the  
7 printout that I pro -- provided you with that you're  
8 saying is outdated. We'll mark that as Exhibit 5.

9 A. Okay.

14:14:25 10 Q. And then I will send my colleague Joe  
11 Kurt here briefly to step out and -- and to go find  
12 a more recent one and print out four copies and not  
13 delay our proceedings?

14 A. Okay. That -- that sounds good.

14:14:36 15 MR. BOYNTON: So would you like to mark  
16 one --

17 A. And so all of this information has, you  
18 know, been clearly updated.

19 BY MR. BOYNTON:

14:14:41 20 Q. So it's not inaccurate, but it might be  
21 incomplete?

22 A. Exactly. That's right. And it -- it  
23 may be now that I'm -- I apologize. It may be more  
24 states than 22 different states.

14:14:51 25 Q. But you -- that was accurate at a point

1       in time previously?

2           A.     At a point in time --

3               MS. HARLESS: Hold on.

4           A.     -- it was accurate.

14:14:55 5               MS. HARLESS: Is this getting marked  
6       or --

7               MR. BOYNTON: She's got it right here  
8       for that purpose. It's 5?

9               THE REPORTER: Yes. I'm just waiting to  
10      get my hands off the keys.

11              MR. BOYNTON: I'm sorry. We can stop  
12      for a second.

13               (Off-the-record discussion)

14               (Fairfax Exhibit 5 was marked for  
15      identification.)

16              MR. BOYNTON: Back on the record.

17               We have marked the printout of  
18      Mr. Fairfax's bio that he has identified as from an  
19      earlier point in time in his career as Fairfax 5.

14:15:42 20     My colleague, Mr. Kurt, has left the room briefly --

21               MS. HARLESS: Do you want me to hand him  
22      that one?

23               MR. BOYNTON: I wasn't even going to ask  
24      him any more questions on it, but he's welcome to --

25               MS. HARLESS: Oh.

1 BY MR. BOYNTON:

2 Q. You're welcome to have it in front of  
3 you, sir. I'm not --

4 A. Got you.

14:16:22 5 Q. -- trying to hide anything from you.  
6 A. No. No. No. No. I think you showed  
7 it to me. It's exactly as you said. It's another  
8 point in time, but it's correct.

9 Q. Thank you.

14:16:31 10 And we will step away from that document  
11 for a moment until we can revisit the more updated  
12 version of it.

13 I -- I think maybe the most or at least  
14 cumbersome from your perspective way to address your  
14:16:49 15 -- your background is to work through your biography  
16 which -- or at least the portion of it that was  
17 provided to us in the original expert report, the  
18 initial expert report --

19 A. Uh-huh.

14:17:00 20 Q. -- in Appendix A.

21 A. Okay.

22 Q. So we've premarked as Fairfax Exhibit 2  
23 the entire expert report, which includes all of the  
24 appendices --

14:17:10 25 A. Okay.

1 Q. -- and at this point anyway I'm drawing  
2 your attention only to Appendix A. Does that sound  
3 good to you, sir?

4 A. That sounds perfect.

14:17:17 5 Q. Okay. I will flip it open to you.

6 A. All right. I appreciate it.

7 Q. And please take whatever time you'd like  
8 with the document.

9 A. Uh-huh.

14:17:26 10 Q. Do you recognize -- and -- and go ahead  
11 and flip through at least Appendix A, if you would.

12 A. Oh, just to make sure that it's  
13 complete?

14 Q. Exactly.

14:18:16 15 A. Let's see. We are going focus on the  
16 résumé portion or --

17 Q. At -- at -- yes.

18 A. At this point --

19 Q. At this point --

20 A. Okay.

21 Q. -- in time we're going to focus on the  
22 résumé por -- portion, then circle back to the rest  
23 of the report, but --

24 A. Okay.

14:18:28 25 Q. -- for -- for the pages you've reviewed

1 does that appear to be Appendix A --

2 A. Yes.

3 Q. -- of your initial report?

4 A. Yes.

14:18:32 5 Q. And your initial report, as I understand  
6 it, was given -- or were finalized -- two more  
7 pieces of paper in front of you -- on July 15th,  
8 2019?

9 A. Yes.

14:18:46 10 Q. So the information provided in Appendix  
11 A would have been accurate and complete, to your  
12 knowledge, as of that date?

13 A. Yes. I would imagine so.

14 Q. And do you have any reason, sitting here  
15 today, to believe it's inaccurate or incomplete?

16 A. No, not at this moment.

17 Q. Fair enough. It's always a challenge to  
18 either go forward or backward in time.

19 A. That's right.

14:19:11 20 Q. But let's do this. Let's do current and  
21 then we'll trace it from -- in -- in chronological  
22 order.

23 A. Okay.

24 Q. Does that work for you, sir?

14:19:19 25 A. Sounds good.

1 Q. So currently, sir --

2 (Off-the-record discussion between  
3 defense counsel)

4 MR. BOYNTON: Okay. Another level of --  
14:19:29 5 another degree of difficulty. All right.

6 What I will do at this moment is just  
7 give this to your counsel to look at. And this is  
8 the -- the information that has been printed off the  
9 censuschannel.com page, but the formatting of it is  
14:19:47 10 a bit challenging to read. So my colleague has  
11 endeavored to do a cut and paste, I believe, of the  
12 relevant portions as to Mr. Fairfax's background.  
13 I'm not going to put you on the spot right now, but  
14 if you'd review it at a break or -- or whenever, and  
14:20:03 15 if you -- we can agree that the -- the second doc --  
16 document is -- is consistent with the first, maybe  
17 we can mark them as a number A and B and go from  
18 there.

19 MS. HARLESS: Yeah.

14:20:12 20 MR. BOYNTON: But I'm not --

21 MS. HARLESS: Fine.

22 MR. BOYNTON: -- asking you to do that  
23 right this second.

24 MS. HARLESS: Thank you.

14:20:16 25

1 BY MR. BOYNTON:

2 Q. So, Mr. Fairfax, I'm going to ask you a  
3 series of questions about your background and your  
4 ex -- experience and expertise. I'm going to start  
14: 20: 30 5 with what you do presently and then we can trace it  
6 forward in time --

7 A. Sure.

8 Q. -- if that works for you?

9 A. Uh-huh. Very good.

14: 20: 35 10 Q. What do you do presently?

11 A. I -- I focus on exactly what I call  
12 myself, a demographic and mapping consultant, which  
13 encompasses -- encompasses a variety of demographic and  
14 mapping analysis and processes.

14: 20: 48 15 So my specialty is redistricting;  
16 however, once I got my master's I began expanding on  
17 that. And so now I do more geospatial analysis and  
18 some database analysis pertaining to mapping let's  
19 say.

14: 21: 11 20 Q. So how long would you say you've been a  
21 demographic and mapping consultant?

22 A. I first began my involvement with GIS in  
23 1991 working on a project at Norfolk State  
24 University. That was The Redistricting Research  
14: 21: 36 25 Project.

1 Q. I --

2 A. I -- go ahead.

3 Q. I'm -- I'm sorry. I --

4 A. Uh-huh.

14: 21: 39 5 Q. I didn't mean to cut you off at all.

6 A. Uh-huh. Sure.

7 Q. I'm looking at page 31 of the overall  
8 Exhibit 2. And it identifies a period of time  
9 Norfolk State University, Political Science

14: 21: 49 10 Department, Norfolk, Virginia --

11 A. Yes.

12 Q. -- 1991 to 1999. Was that the period of  
13 time you're referring to?

14 A. That's correct.

14: 21: 55 15 Q. So how did you come to start in that  
16 position?

17 A. It -- I got there a long way, let's say,  
18 not a straight -- straight way. I had worked for a  
19 couple of companies, Teledyne, which was a Fortune  
14: 22: 13 20 500, manufacturing division, and then EER Systems, a  
21 government consulting firm, and then decided to go  
22 out on my own with a couple individuals and create a  
23 computer training center, the first one on -- in our  
24 area on the peninsula.

14: 22: 31 25 Did that. Timing was bad because it was

1 right before the recession, so we closed the -- the  
2 company. And I wanted to consult and landed a  
3 consulting position at Norfolk State University  
4 working in their computer lab as the lab manager and  
14: 22: 54 5 network person. And then they -- someone introduced  
6 me to another project called The Redistricting  
7 Research Project and I went over there and got hired  
8 for that.

9 Q. And I appreciate you being expansive on  
14: 23: 10 10 that.

11 Starting with 1991, were you hired as an  
12 employee or a independent contractor with Norfolk  
13 State?

14 A. Independent contractor.

14: 23: 18 15 Q. Okay. And -- and what was your title at  
16 that point in time as an independent contractor?

17 A. GIS consultant.

18 Q. And what was the scope of the work you  
19 were providing for Norfolk State at that point in  
14: 23: 29 20 time in 1991?

21 A. The project -- one of the objectives was  
22 to provide technical support in the form of  
23 technical resources to organizations that did not  
24 have the technical know-how or wherewithal to create  
14: 23: 46 25 redistricting plans. And so I was the plan

1 developer. I was a map drawer, if you will.

2 And the second aspect was to go out and  
3 train other universities on how to duplicate what we  
4 were doing at Norfolk State. And so I went to three  
14: 24: 02 5 or four different universities and trained them  
6 actually to do what we were doing.

7 Q. Was Norfolk State developing its own  
8 maps or demographic information at that time?

9 A. They would develop their own plans, yes.

14: 24: 14 10 Q. Okay. And for what purposes were they  
11 developing their plans?

12 A. Oh, you meant --

13 Q. Norfolk State University.

14 A. Oh, no. No. Norfolk State did not  
14: 24: 22 15 develop its own plans. I thought you meant for  
16 other individuals.

17 Q. Okay. I -- I --

18 A. Yeah.

19 Q. I'm just trying to understand the nature  
14: 24: 28 20 of the work --

21 A. Yeah.

22 Q. -- at this point.

23 A. Yeah.

24 Q. So they hire you as an independent  
14: 24: 29 25 contractor --

1 A. Right.

2 Q. -- to -- to develop this ge --  
3 geographic and demographic expertise. Is that fair?

4 A. To a certain extent. Maybe I wasn't too  
14: 24: 40 5 clear. They -- there was a Ford and Rockefeller  
6 Foundation grant. Now, maybe I should have added  
7 that in there. And the purpose of those grants was  
8 to support nonprofit organizations, mostly in the  
9 south, that didn't have the wherewithal -- the  
14: 24: 57 10 technical wherewithal or the skill to draw or  
11 develop their plans. We were the -- there to  
12 develop the plans for them.

13 And the second part was to train other  
14 universities to do the same thing we were doing so  
14: 25: 14 15 they would be trained. And then they would go out  
16 to other organizations, help those organizations  
17 actually develop plans like we were doing.

18 Q. I see. And so when these other  
19 nonprofit organizations were interested in  
14: 25: 25 20 developing plans were they compensating Norfolk  
21 State for that work?

22 A. No, not that I recall. I think this was  
23 done through the Ford and -- and Rockefeller  
24 Foundation grants.

14: 25: 34 25 I think there was a period of time where

1       they purchased software or something. I -- I can't  
2       remember that, but we got a great deal on the  
3       software package, but I -- there wasn't a -- a -- a  
4       cost associated. Maybe a cost expense or something  
14: 25: 49  5 like that. There was some expenses associated with  
6       it.

7           Q.     And so you were paid from the grant  
8       funding?

9           A.     Yes.

10          Q.     Okay.

11          A.     Yes.

12          Q.     And were you paid on an hourly basis?

13          A.     Yes.

14          Q.     Do you recall what your rate of pay was  
14: 26: 01  15 back then?

16          A.     Hmm. I -- I -- I think it was \$20 an  
17       hour.

18          Q.     Just getting started. Understood.

19          A.     Right. You know.

14: 26: 10  20       Q.     Absolutely.

21          A.     Yeah.

22          Q.     Okay. So -- so that became -- well,  
23       what was the next iteration of that work with  
24       Norfolk State?

14: 26: 17  25       A.     Insofar as the project was concerned

1 or --

2 Q. Yes. Or other work at N -- at Norfolk  
3 State at that time.

4 A. Right. At -- at -- the -- the  
14: 26: 25 5 co-director and I became -- I'm thinking of the  
6 Miami-Dade expert masters. We became expert masters  
7 for Miami-Dade in a court case that -- we drew  
8 probably over 50 plans in -- in that -- in that  
9 project or that effort.

14: 26: 47 10 There was another project or effort --  
11 I'm thinking of special ones that came out, which is  
12 where we actually -- I think the -- the legal  
13 defense fund -- NAACP legal defense fund turned to  
14 us and the attorneys I think that they were  
14: 27: 03 15 collaborating to do some analysis on compactness  
16 measures for the 12th Congressional District in the  
17 context of the Shaw v. Reno case. And so that was a  
18 -- a unique aspect.

19 Q. All right. What -- what state's 12th  
20 Congressional --

21 A. 12th.

22 Q. -- District?

23 A. North Carolina's 12th --

24 Q. North Carolina.

14: 27: 23 25 A. -- Congressional District.

1 Q. Okay. So you did some work with North  
2 Carolina in -- or in North Carolina and in  
3 Miami-Dade at that point in time with Norfolk State?

4 A. Right.

5 Q. Okay.

6 A. In addition to all the other plans we  
7 drew throughout the south. We -- we covered a  
8 variety of different states. Probably 200 to 300  
9 plans we drew at Norfolk State during that period of  
14:27:41 10 time.

11 Q. And you were in the role of special  
12 master with respect to the Miami-Dade --

13 A. I --

14 Q. -- plan. Were you a special master --

14:27:44 15 A. Team.

16 Q. I'm sorry. Your -- your team was  
17 special master.

18 A. The -- the co-director and I were sort  
19 of a special masters team. I was the map drawer.

14:27:54 20 He was the political science person.

21 Q. Did you give testimony in that case  
22 or --

23 A. No.

24 Q. -- just provide a report?

14:28:01 25 A. No. Just provided the plan.

1 Q. Did you or your team serve as special  
2 master between 1991 and 1999 on any other matters?

3 A. No.

4 Q. Okay. With respect to the other  
14: 28: 20 5 redistricting plans that were developed during that  
6 Norfolk State period from 1991 to 1999 in what role  
7 did you serve?

8 A. In pa -- post the redistricting project  
9 or -- because it -- it evolved into what was called  
14: 28: 38 10 the special projects. And that covered a variety of  
11 different analyses -- socioeconomic analyses that  
12 efforts came in. And so it sort of evolved because  
13 the redistricting cycle ran out, of course, and  
14 there were other sort of database and geospatial  
14: 28: 59 15 projects that they turned to.

16 Q. Fair enough. And I -- I'm looking at --  
17 at the particular bullet point that says "developed  
18 over 200 redistricting plans located in over 60  
19 jurisdictions in the states of Florida, Louisiana,  
14: 29: 14 20 North Carolina, Texas and Virginia." Just that  
21 sentence.

22 We -- we -- we talked about the -- the  
23 plans that were developed for Miami-Dade as -- as  
24 part of a special master team. I'm trying to get at  
14: 29: 28 25 in what other circumstances or contexts you

1 developed -- contexts you developed these plans.

2 MS. HARLESS: Objection to form.

3 BY MR. BOYNTON:

4 Q. You can answer.

14:29:43 5 A. First, this doesn't include the

6 Miami-Dade, right?

7 Q. Okay.

8 A. And -- and so that's in addition.

9 And so any of the plans outside of that

14:29:56 10 I cannot recall at this particular time. I don't

11 think there were any -- any other plans. They

12 weren't noteworthy for me to put it in my résumé.

13 You know, of course, I might have done a

14 plan here and there that I just might have

14:30:16 15 forgotten, but this covers, I think, the bulk of

16 them.

17 Q. And -- and I'm still trying to

18 understand --

19 A. Uh-huh.

14:30:26 20 Q. -- the context in which you developed

21 over 200 redistricting plans while -- for -- during

22 your time at Norfolk State between 1991 and 1999.

23 A. Okay. And what's your -- what's the

24 issue?

14:30:39 25 There -- there were multiple

1 organizations. And I can't -- I can't recall how  
2 many organizations, but they turned to us for plan  
3 development. We would develop those plans and  
4 provide it to them. Explanations in addition. And  
14:30:59 5 -- and possibly the co-director would go and -- and  
6 actually maybe speak at a -- a public hearing or  
7 something in that context.

8 Q. Do you recall any of them being in a  
9 litigation context other than the Miami-Dade one?

14:31:21 10 A. Yes. And I'm trying to recall. The  
11 very first plan that we drew was for the City of  
12 Norfolk. And -- and we drew those plans -- it  
13 ultimately was -- was selected, but I cannot recall  
14 the specifics of the litigation. I think there was  
14:31:52 15 some litigation that -- pertaining to that.

16 Q. Okay. Do you recall giving testimony?

17 A. No. No, I didn't. At no time during  
18 this period of time at -- at the -- The  
19 Redistricting Research Project did I give any  
14:32:05 20 testimony.

21 Q. Okay. That helps --

22 A. Yes.

23 Q. -- clarify.

24 A. Yes. I didn't understand what you were  
14:32:09 25 looking for.

1 Q. You were on a team that developed maps  
2 for whatever reasons, and you were not kind of the  
3 point person on it; is that fair?

4 A. Absolutely. I was the map drawer at  
14:32:20 5 that time.

6 Q. Understood.

7 A. Yes.

8 Q. So where did your work with Norfolk  
9 State University from 1991 and nine -- through 1999  
14:32:32 10 take you next?

11 A. The next redistricting cycle, which was  
12 in 2000, centered around an effort at the  
13 Congressional Black Caucus Institute, and that's  
14 where I became the consulting demographer. I  
14:32:54 15 believe it was 2001 to 2003.

16 And so during that period of time the  
17 effort centered around analyzing, reviewing,  
18 developing plans where African Americans could elect  
19 a member of -- candidate of choice at the  
14:33:13 20 congressional level.

21 Q. And were you a consultant or -- that's  
22 not the right word. Were you a employee or an  
23 independent contractor for the Congressional Black  
24 Caucus Institute?

14:33:20 25 A. Consulting -- consulting demographer is

1 what they called me.

2 Q. And that -- you were never an employee;  
3 is that correct?

4 A. That's correct.

14:33:26 5 Q. Do you recall what your rate of pay was  
6 as a consulting demographer for -- for that  
7 organization?

8 A. I -- I believe I was paid -- it wasn't  
9 -- the total came to about 85,000 a year. So I know  
14:33:47 10 they -- they apportioned it somehow. I can't  
11 recall, but, yeah, the total came to about 85- a  
12 year.

13 Q. Were they the only entity for whom you  
14 were performing consulting or demographic services  
14:33:59 15 between 2001 and 2003?

16 A. They were the primary. I might pick up  
17 -- because I -- I'm a consultant I might pick up a  
18 occasional job here and there. So -- and let me  
19 see. I don't know if anything is included. For  
14:34:13 20 example, I would train somebody.

21 Q. And I'm not trying to trick you at all.

22 A. Uh-huh.

23 Q. I see --

24 A. The training was --

14:34:21 25 Q. -- the 2001 to 2003 was essentially a

1 stand-alone period of time on your résumé.

2 A. Uh-huh.

3 Q. I'm just trying to get a sense of the  
4 scope of work you were providing for that  
14: 34: 30 5 organization.

6 A. Right. Right. In -- in essence, they  
7 were really the -- the sole contractor because it  
8 was a lot of hours.

9 Q. Did you do that -- well, did you live in  
14: 34: 41 10 Hampton for the entirety of your professional  
11 career?

12 A. Yes. Yes.

13 Q. Did you perform this work from Hampton  
14 or were you in another location?

14: 34: 47 15 A. Both. I would come up, I would spend  
16 three days, sometimes four days, and then drive  
17 back. And then I was on call if a project effort  
18 popped up, so...

19 Q. Did you have an entity under whom you  
14: 35: 05 20 worked or were you essentially kind of bidding  
21 yourself out for -- for work?

22 A. I -- I was Anthony Fairfax sole  
23 proprietor at the time.

24 Q. I see. And what -- and just for  
14: 35: 14 25 completeness purposes, what was the period of time

1 for which you were -- during which you were Anthony  
2 Fairfax sole proprietor?

3 A. From I believe 2001 all the way till I  
4 formed CensusChannel, which was 2009.

14: 35: 30 Q. Thank you.

6 Did your work for the Congressional  
7 Black Caucus Institute involve anything beyond the  
8 drawing or analysis of congressional district maps.

9 A. There was one occasion where a member of  
14: 35: 53 10 Congress wanted to be represented in a court case,  
11 so I developed a plan so he could submit to the  
12 court. And I went down -- it was Earl Hilliard,  
13 Congressman Earl Hilliard. And I, you know,  
14 represented I guess as an expert. I didn't testify,  
14: 36: 09 15 but I was providing advice, essentially, to -- to  
16 the attorneys that were there.

17 Q. What state was that?

18 A. Alabama.

19 Q. Alabama.

14: 36: 20 20 Did you have occasion to provide expert  
21 testimony or evidence in any other matters in the  
22 congressional Black Caucus Institute consultation?

23 A. No.

24 Q. Okay. It appears from that consultancy,  
14: 36: 42 25 if that's the right word, you -- you moved into

1 Democracy South work in 2004. Is that accurate?

2 A. Yes. Yes.

3 Q. What -- what was that -- the scope of  
4 that work?

14:36:51 5 A. Es -- essentially Democracy South  
6 focused on increasing voter registration, getting  
7 out the vote, in underserved communities. So I was  
8 a consultant for them. A small organization.

9 Q. Are they a -- a nonprofit?

14:37:11 10 A. Yes. Yes. A nonprofit.

11 Q. Were -- were you physically in Virginia  
12 Beach or is that where they are based or both?

13 A. They were based in Virginia Beach.

14 Q. Were you working primarily from Hampton  
14:37:20 15 at that point --

16 A. Yes.

17 Q. -- in time?

18 A. Uh-huh.

19 Q. Okay.

14:37:22 20 A. Yes.

21 Q. Did you provide specific map drawing in  
22 regard to the Democracy South work?

23 A. Yes. Yes. One of the things we did was  
24 provide under-registered-voting maps or  
14:37:39 25 get-out-the-vote maps in the context of where to go

1 and target for voter registration drives or  
2 canvassing.

3 Q. How do you determine that information?

4 A. That may be proprietary. No.

14:37:54 5 I'll give you the general sense. In  
6 essence, you look at the difference between the  
7 voting age population and the registered voters in a  
8 particular area and the difference are -- could be  
9 those that are unregistered. I mean, there's a

14:38:16 10 little more to that, but --

11 Q. That's the 30,000-foot-view's worth?

12 A. Exactly.

13 Q. Okay.

14 A. That's right. That's right.

14:38:23 15 Q. Fair enough.

16 Was it primarily a voter registration  
17 effort or were there other efforts on -- on --  
18 ongoing that you were involved with at Democracy  
19 South?

14:38:32 20 A. There were projects that -- that  
21 actually came up. For example, let me -- let me --  
22 there was one project that was pretty interesting.  
23 Like this web-based interactive map. We developed  
24 something that people could click on and actually  
14:38:48 25 see the unregistered voters in a particular area.

1 Q. And -- and that was generated -- that  
2 was based on data that you had generated with this  
3 proprietary work?

4 A. Correct.

14: 38: 56 5 Q. Okay.

6 A. Correct.

7 Let me see. There was another project.

8 I don't know if I even included it, so -- a scanning  
9 project where we were looking at accelerating how  
14: 39: 16 10 people scanned walk lists, essentially. And we  
11 developed a routine to -- to -- to scan  
12 automatically through a scanner, which would help  
13 input data. And I don't -- I don't see that.

14 Q. Oh. I -- I -- I see responsibilities  
14: 39: 32 15 included co-managing the overall civic engagement  
16 effort and was solely responsible for integrating  
17 and processing catalyst voter data into targeting  
18 maps and walk lists for all focus areas.

19 A. Uh-huh.

14: 39: 46 20 Q. Is that what you're referring to?

21 A. Not exactly. This was -- this is  
22 somewhat different. That was a -- where I was  
23 co-director of this project, a sub-project of  
24 course, with Democ -- Democracy South, but this was  
14: 40: 01 25 a separate effort, and I -- I probably didn't

1 include this in the résumé because I don't see it.

2 Q. Explain to me what a walk list is.

3 A. Essentially, when you're looking at  
4 those individuals that -- there's a database -- of  
14: 40: 23 5 course, a voter database. And you can determine  
6 which voters vote and which voters don't. And from  
7 that you can develop a walk list to try to go to  
8 those places and households of those individuals  
9 that don't vote. And that walk list represents the  
14: 40: 37 10 name and address. And you can do a variety of other  
11 things.

12 Q. So is it accurate -- or that's probably  
13 not a good word. Is it a fair summary to say this  
14 was efforts to generate a database relating to  
14: 40: 55 15 unregistered voters?

16 A. And you're speaking walk lists?

17 Q. The walk -- the -- the walk list effort  
18 in that context.

19 A. The walk list comes from a database  
14: 41: 02 20 that's generated. And then you only pull from those  
21 individuals that don't turn out and vote. And so  
22 that's the database. And then you print those out  
23 in -- in some, you know, tabular manner that can  
24 allow a person to go to a street. And, of course,  
14: 41: 18 25 we would produce a map so they'd know where to go,

1 but --

2 Q. And the scanning function?

3 A. Which was a separate -- the scanning  
4 function involved at that project was -- if you went  
14: 41: 31 5 to a door you would make a notation. And the  
6 scanning function we put together was you would take  
7 that sheet and then insert it into a scanner. It  
8 would automatically tally that.

9 So what would normally occur would --

14: 41: 45 10 someone have to type that in.

11 Q. It -- it was a shortcut for data entry?

12 A. Exactly.

13 Q. Okay. Now I understand.

14 A. Exactly.

14: 41: 53 15 Q. Thank you.

16 That work continued through 2008?

17 A. Yes.

18 Q. What -- why did you cease doing that  
19 work?

14: 42: 03 20 A. Democracy South was a small organization  
21 and it -- it -- it really ended. It -- it closed  
22 its doors, really, probably around that time.

23 And around that time that's where the  
24 next round of redistricting was really picking up,  
14: 42: 19 25 in 2009. And so I don't know if it's -- you know,

1 it's just the fate, but -- fates, but I happened to  
2 begin to pick up in redistricting work around that  
3 particular period of time.

4 Q. So that's with CensusChannel, LLC?

14: 42: 36 5 A. Yes.

6 Q. That's an LLC you formed personally?

7 A. Yes.

8 Q. Does it have any employees?

9 A. I would be the only employee. There is  
14: 42: 43 10 just -- it's a single-member LLC.

11 Q. And that was formed in 2009?

12 A. Yes.

13 Q. It's existed continually until today?

14 A. Yes.

14: 42: 52 15 Q. What are the annual revenues let's say  
16 this year or the last calendar year?

17 A. Last year I didn't do that well. I'm --  
18 I'm down close to around under 60,000 last year.

19 And I guess the year before was close to about  
14: 43: 15 20 80,000. This year I'll probably do back to the  
21 80,000, so may break 90- if --

22 Q. Okay.

23 A. -- a couple things come through.

24 Q. And -- and that's revenues not net  
14: 43: 24 25 income?

1 A. That's revenues. That's correct.

2 Q. Okay.

3 A. And I keep a -- a lean -- you know,  
4 that's why I have an office at home. So most of  
14: 43: 31 5 that is -- you know, for consulting what -- what you  
6 try to do is make everything -- the operating  
7 expenses very low.

8 Q. Understood.

9 A. Uh-huh.

14: 43: 42 10 Q. And -- and so I assume that the bulk of  
11 the work was during the redistricting cycle coming  
12 out of the 2010 centrus -- cen -- census; is that  
13 correct?

14 MS. HARLESS: Objection to form.

14: 43: 54 15 MR. BOYNTON: I -- I -- I'm sure I can  
16 rephrase.

17 A. Uh-huh.

18 BY MR. BOYNTON:

19 Q. What -- what's the high point of the  
14: 43: 59 20 revenue on an annualized basis from clear --  
21 CensusChannel, LLC's formation till today? What was  
22 your best year?

23 A. The best year was probably -- wow. I  
24 think it was 120- to -30,000. Something like that.

14: 44: 22 25 Q. Do you recall which year that was? Best

1 guess.

2 A. 2009 or '11 -- 2009 or '10. 2009, '10  
3 or '11. 2010 probably. Well, I -- I don't want to  
4 ask -- answer for sure because -- it's either 2009,  
14: 44: 55 5 2010. I -- probably 2010, but I -- I'm not a  
6 hundred percent sure.

7 Q. Fair enough.

8 A. Okay.

9 Q. And -- and so in 2009-2010 who were your  
14: 45: 05 10 primary clients?

11 A. One of the projects was a national black  
12 caucus of state legislators. And that was a -- that  
13 was probably one of the -- the biggest projects  
14 during that particular period of time.

14: 45: 26 15 Q. Now, was that an ex -- exercise in -- in  
16 map drawing or was there some other type of service  
17 that you were principally providing to the NBCSL?

18 A. Yes. Yes. That's probably what I  
19 should have said, yes. It -- it pertained to the  
14: 45: 42 20 2010 census. And it was map drawing and it was  
21 development of a series of targeted maps going out  
22 to black state legislators throughout the country so  
23 they can actually know the areas that they need to  
24 focus in on for the -- the 2010 census.

14: 46: 01 25 Q. For redistricting purposes of their own?

1           A.     No, not for redistricting. This is  
2 purely 2010 census.

3                         One -- one of the things -- one of the  
4 -- one of the purposes of the census outreach is to  
14: 46: 16 5 ensure that we have a full and complete count. And  
6 so you do that by, you know, finding and locating  
7 areas that they call hard to count. And the census  
8 has a measurement of what's hard to count. And so  
9 you can actually target those census tracts, maybe  
14: 46: 30 10 even block groups, of where to actually go that has  
11 a high likelihood of being undercounted.

12           Q.     This was pre-results? This was the  
13 effort to actually count?

14           A.     Absolutely.

14: 46: 40 15           Q.     I see.

16           A.     That's right. And that's exactly --  
17 that's right.

18           Q.     And you also did some work with Duke  
19 University during that 2010-2011 window; is that  
14: 46: 49 20 correct?

21           A.     That's correct.

22           Q.     What was that work?

23           A.     I -- i was one of -- of two project  
24 managers. I was on the mapping side. I -- I  
14: 46: 57 25 managed the -- the cartographic side, if you will.

1                   And the goal was to prepare or train  
2 possibly, if you will, different cartographers to  
3 show them how to actually become a mapping expert on  
4 that side.

14: 47: 14 5                   And the other side was -- Dick Angstrom  
6 was on the other side. He actually trained  
7 individuals to show them how to become an expert in  
8 the political science side.

9                   Q. And -- and with respect to the -- well,  
14: 47: 28 10               first of all, what is the Southern Coalition for  
11 Social Justice?

12               A. That's an organization that focuses on  
13 -- they have a variety of aspects, but they have --  
14 they're focused on having a litigation team that can  
14: 47: 45 15 ensure that voting, civil rights, a variety of  
16 aspects like that, are fair. And it's grown from  
17 virtually nothing to a -- a -- a fairly decent size  
18 organization now.

19               Q. And what is REGSS?

14: 48: 02 20               A. Right. At Duke there's a Center for  
21 Race and Ethnicity and Gender in the Social  
22 Sciences. And so they focus on those -- those  
23 aspects. And they were the two sponsors of this.

24               Q. Of this effort to do --

14: 48: 16 25               A. To train or prepare.

1 Q. Did you ever do work directly for either  
2 of those organizations?

3 A. I've done -- excuse me -- work as a --  
4 excuse me -- redistricting expert for the Southern  
14: 48: 31 Coalition for Social Justice.

6 Q. And I -- it may well be here. Did you  
7 tell me when that work was done? I see it's 25 --  
8 '15 to 2018.

9 A. Yes. A variety of -- of cases.

14: 48: 42 10 Q. Okay. So we'll get up --

11 A. Uh-huh.

12 Q. -- to that --

13 A. Uh-huh.

14 Q. -- in a minute.

14: 48: 47 15 Did you do work directly for the REGSS?

16 A. No. No. Just pertaining to that  
17 particular effort. It was, you know, several months  
18 in preparation and then the actual two weeks to  
19 actually do this.

14: 49: 01 20 Q. What is the Community Policy Research &  
21 Training Institute (One Voice in -- close  
22 parentheses, in -- in Jackson, Mississippi?

23 A. Right. It -- it's a nonprofit  
24 organization. Exactly what it says. It does  
14: 49: 16 25 research and educational training around a variety

1 of things. I believe, you know, voting rights,  
2 education and -- locally in the state.

3 And so one -- what I did was I developed  
4 or helped develop a plan. One of the aspects of  
14:49:38 5 that was them involving themselves in restricting.

6 And so as they were getting going in -- in  
7 redistricting they needed some help and assistance,  
8 and so I helped them actually develop a -- a plan.

9 And -- and they needed -- I put a large-scale map  
14:49:56 10 because they wanted this huge map to show the -- the  
11 entire state so someone could come and look at that  
12 map.

13 Q. And -- and so that was  
14 post-census-results work in support of  
14:50:11 15 redistricting?

16 A. Yes. Yes. That's after this 2010  
17 census came out.

18 Q. Okay.

19 A. That's correct.

14:50:14 20 Q. Then in 2011 you did work for a number  
21 of different other organizations. Can you tell me  
22 what the -- the largest portion of that work was by  
23 client group?

24 A. And -- and you're speaking in regards to  
14:50:31 25 just -- are you saying what did I focus on?

1 Q. Well, I see a number of -- of entries  
2 for 2011 --

3 A. Uh-huh.

4 Q. -- on page 29. And that comports with  
14:50:42 5 what you recall being a pretty busy time --

6 A. Uh-huh.

7 Q. -- or at least a --

8 A. Uh-huh.

9 Q. -- a higher --

10 A. Uh-huh.

11 Q. -- revenue time --

12 A. Uh-huh.

13 Q. -- for you. And so I'm trying to get a  
14 sense of what you primarily were spending your time  
14:50:52 15 on in 2011.

16 A. Redistricting was mostly the -- you  
17 know, usually the period of time between 2010 to  
18 2012, maybe '13, was a very hot point in time for  
19 me.

14:51:08 20 Q. All of the entries on the bottom half of  
21 page 29 starting with Congressional Black Caucus  
22 Institute --

23 A. Uh-huh.

24 Q. -- and ending with Louisiana Legislative  
14:51:24 25 Black Caucus -- all of those were consulting work,

1 correct?

2 A. Correct.

3 Q. You were not an employee for any of  
4 those organizations?

14:51:28 5 A. That is correct.

6 Q. Was the nature of the consulting work  
7 you provided to those different organizations  
8 primarily map-drawing efforts?

9 A. Map-drawing efforts, that's correct, or  
14:51:45 10 -- or -- map-drawing efforts either in -- in  
11 physical contact or in online mapping. There was a  
12 -- a -- a -- a project, a -- an effort of a  
13 subcontract for one of the energy companies.

14 Q. Do you recall what energy company?

14:52:01 15 A. You know, I -- I -- I signed a  
16 nondisclosure agreement and I'm not sure whether --

17 Q. I'm not going to ask you to go --

18 A. But the --

19 Q. -- beyond that --

20 A. -- the contractor was Net --

21 Q. -- in this context.

22 A. Net Communications.

23 THE REPORTER: I'm sorry.

24 THE DEPONENT: Net Communications was --  
14:52:19 25 was the primary contractor. That's in 2014 and '15.

1 BY MR. BOYNTON:

2 Q. That's Tallahassee, Florida, 2014-'15?

3 A. Yes.

4 Q. Okay. Did -- did the nature of your  
14:52:29 5 work change or evolve in a general sense after 2011?

6 A. What happened -- oh, somewhat, yes.

7 Yes.

8 Q. Explain how.

9 A. Yes. In -- in -- in 2010 -- '12 I began  
14:52:47 10 to obtain my master's. And so, one, a couple things  
11 hap -- happened. I realized that I could not com --  
12 complete that master's at the level that I wanted to  
13 complete, so I had to, one, reduce workload in order  
14 to actually complete the program.

14:53:10 15 So 2012 to 2016 is sparse because I was  
16 completing my master's.

17 Q. And you received both a graduate  
18 certificate and a master's of geospatial information  
19 science and technology from North Carolina State  
14:53:27 20 University; is that correct?

21 A. That's correct.

22 Q. Were you physically located in Raleigh  
23 during that time?

24 A. No. No.

14:53:31 25 Q. Those were remote --

1 A. Yeah.

2 Q. -- work? I'm sorry.

3 A. Right. They have a -- a program that  
4 has both on-site and off-site. And probably about  
14: 53: 41 5 60 to 70 percent -- and I'm guessing -- of the  
6 courses are both -- are dual. And so what I had to  
7 do was pick and choose the ones that would enable me  
8 to not have to uproot myself and -- and physically  
9 be there. But it's possible, and so that's what I  
14: 54: 01 10 did during that period of time.

11 Q. What prompted you to seek a master's of  
12 geospatial information science and technology?

13 A. Well, two things. One, I wanted to move  
14 my credibility up some. And with a bachelor's, even  
14: 54: 18 15 though it's a bachelor's in electrical engineering,  
16 there still is a question when you begin to move up  
17 the ladder of do you have a master's. And so I  
18 wanted to check that off and -- and -- and -- and do  
19 so.

14: 54: 32 20 The second thing I wanted to do was  
21 expand my business capabilities. And so what this  
22 did is this broadened what I can do I think  
23 significantly now from what I used to be able to do.

24 Q. Describe the difference in what you can  
14: 54: 47 25 do post master's versus previous master's.

1           A.     One of the things that -- yeah, I  
2 focused -- prior to that I told you -- told you is  
3 was with -- with redistricting, maybe voter  
4 registration, getting out the vote.

14: 55: 07  5               This program is divided really into --  
6 to two different -- accessing, processing and  
7 analysis. One is using what's called ras -- raster  
8 data -- it's like images -- satellite images, which  
9 I had no experience in. And just to give you a -- a  
14: 55: 31  10 brief, you know, analysis, you can, for example,  
11 analyze what they call land coverage and from  
12 satellite images able to determine whether something  
13 is grass or something is an infrastructure or  
14 something is water or soil. I had no clue of what  
14: 55: 48  15 that was.

16               And the other is vector analysis.

17               And my experience with probably the  
18 leading GIS package dramatically improved, which is  
19 -- ArcGIS is probably the leading GIS package that's  
14: 56: 06  20 out there.

21               And so I'm now able to utilize that  
22 system both desktop as well as online proficiently.

23           Q.     How did those additional skill sets  
24 impact your work in this case?

14: 56: 23  25           A.     In this --

1 Q. In -- in the case we are presently  
2 having a deposition in, the -- the Holloway and  
3 Allen v. City of Virginia Beach, et al.

4 MS. HARLESS: Objection to form.

14:56:33 5 A. I -- I would say that, although I -- I  
6 intentionally focused on Maptitude -- using  
7 Maptitude for everything because I didn't want to  
8 mix up two different GIS packages -- I could  
9 probably do some of the processing disaggregation  
14:56:55 10 using the ArcGIS. I didn't, but I could have.

11 Prior to that I -- I -- I -- I wouldn't  
12 have been able to do that.

13 BY MR. BOYNTON:

14 Q. Because you wouldn't have had the RGIS  
14:57:10 15 background?

16 A. The Arc.

17 MS. HARLESS: Objection to form.

18 BY MR. BOYNTON:

19 Q. I'm sorry. Please answer the question  
14:57:14 20 or -- or I can rephrase it if you prefer.

21 A. No. I -- I -- I didn't have the  
22 experience of using ArcGIS. And so I decided -- I  
23 mean, Maptitude is proficient. All of the functions  
24 is -- are excellent. So there was no need for me to  
14:57:27 25 actually go to ArcGIS, but I could. I could have

1 done something similar using ArcGIS.

2 MS. HARLESS: And for the record can you  
3 spell ArcGIS?

4 THE DEPONENT: Oh. I'm sorry.

5 A-R-C-G-I-S. Arc.

6 BY MR. BOYNTON:

7 Q. And -- and the --

8 A. I'm sorry.

9 Q. You had used Maptitude previous to  
14:57:48 10 receiving your master's degree from North Carolina  
11 State, correct?

12 A. Yes. Yes.

13 Q. How did you learn to use the Maptitude  
14 software package?

14:58:01 15 A. I think a long time ago I went to a  
16 training. That was probably the only training that  
17 I had. But then besides that it's basically  
18 using -- reading manuals, software manuals, and the  
19 experience of figuring things out.

14:58:11 20 Q. How long have you been using Maptitude  
21 on your -- based on your recollection?

22 A. Probably 20 years. I think it -- it --  
23 it -- the -- the program was called something else  
24 prior to Maptitude, and I used that. So actually  
14:58:35 25 probably more -- I used the precursor to Maptitude

1 as well. So probably more than 20 years. Maybe 22,  
2 23, if you add in the precursor to Maptitude. I  
3 think it was -- I don't want to guess. It was a  
4 different name.

14: 58: 51 5 Q. Did that take you to the mid to late  
6 1990s --

7 A. Yes. Yes.

8 Q. -- when you started using this software  
9 suite or its predecessor?

14: 58: 58 10 A. Yes. Well, maybe not the -- the mid.  
11 More of the end --

12 Q. Okay.

13 A. -- of the '90s.

14 Q. Okay. I get it.

15 A. Yes.

16 Q. Okay. Fair enough.

17 Any other ways that the GIS master's  
18 benefits your work in the Holloway case?

19 A. Let me think about this.

14: 59: 47 20 I think all of the aspects that I've  
21 achieved or performed in this -- I probably could  
22 have done them prior to the master's. And I'm  
23 trying to think if there's anything I couldn't have  
24 done.

15: 00: 05 25 Q. There may be some things you could have

1 done a different way; is that --

2 A. Yes.

3 Q. -- your testimony?

4 A. It -- it --

15:00:09 5 MS. HARLESS: Object --

6 MR. BOYNTON: Okay. I'm --

7 MS. HARLESS: Objection to form.

8 MR. BOYNTON: I'm happy to rephrase.

9 BY MR. BOYNTON:

15:00:12 10 Q. Were there other thing -- are there  
11 certain tasks you performed in regard to providing  
12 testimony in this case that you could have performed  
13 prior to receiving your master's but you can now  
14 perform in ways different than before?

15:00:28 15 A. Right. I think there -- there are  
16 aspects that I could ex -- expand on where prior to  
17 that I wouldn't be able to do it. Maybe multiple  
18 ways, like I think what you're leading to. Yeah.

19 Q. Shifting to a litigation context, when  
15:00:58 20 did you first provide expert testimony to any -- or  
21 expert opinions to any litigation client?

22 A. Hmm. I'm probably have to look at my  
23 résumé for that. And -- and you're speaking of in  
24 -- in the context of either a expert report or  
15:01:20 25 deposition or testimony?

1 Q. Correct.

2 A. Yeah. I -- I would have to say that,  
3 although it's not in the context of a court case, it  
4 was -- the Louisiana Legislative Black Caucus in  
15:02:11 5 2011 was the first time I testified, but that was in  
6 front of the legislature. It wasn't in the context  
7 of a court case.

8 Q. What year was that?

9 A. 2011.

15:02:23 10 Q. 2011?

11 A. Yeah.

12 Q. When -- when did you first testify or  
13 provide opinions in the context of a court case?

14 A. I -- I believe it was the Texas -- the  
15 Perez v. Perry case in 2011.

16 Q. And what was that case about, to your  
17 understanding?

18 A. My understanding was that there were  
19 several legislative districts that the plaintiffs  
15:02:56 20 seeked to -- and let me phrase this from a nonma --  
21 -- litera -- attorney's point of view -- seeked to  
22 adopt versus the -- the districts that they were  
23 approved. And so there were -- there were several  
24 districts that they want -- they wanted to actually  
15:03:21 25 see approved and several districts that they felt

1 were unconstitutional.

2 Q. And you gave testimony? You were  
3 providing specific opinions in that case?

4 A. Yes. What I did was comparative  
15:03:35 5 analysis.

6 Q. By whom -- by which party were you  
7 retained?

8 A. The NAACP.

9 Q. So if -- if I'm reading pages 33 and 34  
15:03:55 10 of your report -- I'm sorry -- Appendix A of the  
11 original Court Exhibit 2, the -- the actual  
12 retaining entity is the -- the listed party? For  
13 example, the Southern Coalition for Social Justice  
14 is who retained you in regard to Moore versus State  
15:04:17 15 of Tennessee?

16 Look -- looking right above the Texas  
17 NAACP thing on page 34. I'm sorry. I -- you're on  
18 30 -- 33, I believe.

19 A. Oh. Okay. You said 34.

15:04:32 20 And could you repeat the -- the  
21 question?

22 Q. I can.

23 A. Uh-huh.

24 Q. Where in -- in the matter of Moore  
15:04:41 25 versus State of Tennessee you provided expert

1       opinions and analysis.

2           A.     Yes.

3           Q.     In that instance were you retained by  
4       and paid by the Southern Coalition for Social  
15:04:53 5       Justice?

6           A.     Yes.

7           Q.     Okay. And -- and so your testimony was  
8       on behalf of either the parties or a third non-party  
9       entity?

15:05:00 10          A.     Correct.

11          Q.     Looking at the North Carolina NAACP, I  
12       see that in that case they were the plaintiff in the  
13       matter. Is that correct?

14          A.     Correct.

15:05:13 15          Q.     And so you provided expert opinions and  
16       analysis on behalf of the plaintiff, North Carolina  
17       NAACP, in 2012?

18          A.     Correct.

19          Q.     What was the nature of that case?

15:05:24 20          A.     It -- it centered around looking at  
21       various compactness measures pertaining to the  
22       congressional and legislative districts.

23          Q.     Do you recall what your opinion was on  
24       the compactness measures in that case?

15:05:41 25          A.     What I found was there were several

1 potential plans that could have been adopted and  
2 those plans were more compact than the approved  
3 plans.

4 Q. What was the nature of your testimony in  
15:06:00 5 the Moore versus State of Tennessee matter?

6 A. And I'm trying to recall the specific  
7 issue for the analysis.

8 Q. There's reference to analysis of county  
9 splits.

15:06:39 10 A. Uh-huh.

11 Q. What do you recall about that aspect of  
12 the case?

13 A. I -- I know that Tennessee has somewhat  
14 of a whole-county provision very similar to North  
15 Carolina and Texas, and there was an issue with  
16 splitting the counties. And I can't recall what the  
17 crux of the issue was, but I essentially analyzed  
18 the county splits and made a determination of  
19 whether they had to be split or not. I can't  
15:07:15 20 recall.

21 Q. And this is all within your expertise in  
22 -- in demographic --

23 A. Yes.

24 Q. -- and --

25 A. Yes.

1 Q. -- mapping consulting?

2 A. Yes.

3 Q. Okay. Switching to page 33, again  
4 trying to work forward in time, Southern Coalition  
15:07:31 5 for Social Justice -- it appears they retained you  
6 in 2014 as well for Perez versus Texas?

7 A. Yes.

8 Q. And that's the matter you had been  
9 previously involved in in 2011?

15:07:42 10 A. Yes.

11 Q. Explain your involvement in the 2014  
12 Southern Coalition for Social Justice engagement.

13 A. Uh-huh. This centered around producing  
14 population projections really for the districts.

15:08:03 15 And so, in essence, what they were looking for was a  
16 method and a way of actually producing more-current  
17 population numbers for the districts. And so what I  
18 did was I extrapolated the districts in order to  
19 produce a more current population projection.

15:08:24 20 Q. Something more current than the 2010  
21 census data?

22 A. Correct.

23 Q. And you used another source of that data  
24 or you generated a projection of some kind?

15:08:34 25 A. In essence, what I did was -- when data

1 is not available I utilized a -- a higher level.  
2 And so I utilized the county-level percentages to  
3 project what the districts were. And I did that --  
4 normally I would not do that, but I did that and  
15:08:58 5 created a verification process.

6 So I first verified that the county and  
7 the districts mimicked each other, meaning that they  
8 followed the same pattern. And once I saw that they  
9 were above -- I think the bulk of it was 90 percent  
15:09:13 10 accurate, let's say. Once I found that out -- I  
11 think there was one that was 80 percent -- then I  
12 could go and actually use the county to actually  
13 project what the district population was.

14 Q. Was -- was that a federal or state case?

15:09:27 15 A. That was, I believe, federal. Wasn't  
16 it? Yes.

17 Q. Okay. And can you describe your method  
18 of verifying your ability to project data from  
19 county to district level?

15:09:47 20 A. The verification utilized the ACS. And  
21 so what I did was I went back and looked at a  
22 previous county year, provided the same process of  
23 projecting, and then comparing the results to the  
24 ACS that we currently had. So we had the currently  
15:10:13 25 -- we had the current ACS that we could look at.

1 And so I took the previous ACS, utilized the county  
2 projections to see if they'd come close to the  
3 current ACS. And they did. And so that meant that  
4 the county was -- or the district was following the  
15: 10: 33 5 county demographics.

6 Q. And district was smaller or larger than  
7 county in that analysis?

8 A. In some cases they were both, yeah.  
9 Yeah.

15: 10: 40 10 Q. Okay.

11 A. And if there was multiple counties, I  
12 apportioned it. So it wasn't a matter of just using  
13 one county. Because many times they split multiple  
14 counties. So I had to actually use -- come up with  
15: 10: 53 15 a methodology of -- of using the -- the weighted  
16 amount for one county versus the weighted amount of  
17 another county.

18 Q. Why did you not simply use the ACS data?

19 A. It wasn't available.

20 Q. But then how were you able to check with  
21 ACS data?

22 A. Right. I checked -- I checked a  
23 previous year. I checked to see if the county  
24 followed the district in a previous year. So we had  
15: 11: 15 25 -- we had the previous year avail -- available, but

1 not --

2 Q. So you were in the 20-to-13 window --  
3 2013-to-2017 window.

4 A. Right.

15:11:25 5 Q. You had the 2013 data. You were  
6 projecting to get the 2014?

7 A. It was more of the 2008-2012. Had that  
8 data. So projecting it to get to exactly what you  
9 were saying.

15:11:37 10 Q. The earlier cycle --

11 A. Yeah.

12 Q. -- but --

13 A. The earlier cycle. Exactly.

14 Q. I got it.

15 A. Exactly.

16 Q. Okay.

17 A. And then the county was more recent data  
18 because that was available.

15:11:47 19 Q. Did you ever come back afterward -- and  
20 once the ACS data was available for 20 -- 2013 to  
21 2017 and see how close your projections had worked  
22 out?

23 A. No. I always wanted to do that, but I  
24 didn't. But the -- from what I understand, the  
15:11:59 25 courts actually accepted what I did.

1 Q. Did you actually testify in that case?

2 A. Yes.

3 Q. Do you recall if it was by deposition or  
4 at trial or both?

15:12:06 5 A. I know I testified at -- at trial. I'm  
6 trying to remember whether I did at deposition.

7 Yes.

8 Q. And that was in a Norfolk -- I'm  
9 sorry -- a North Carolina federal court --

10 A. That --

11 Q. -- or you were just retained by -- by  
12 the social justice group in Durham for testimony in  
13 Texas?

14 A. Right. I had to actually fly to Texas  
15 and do the deposition, I believe, and the testimony,  
16 I believe. And that's what I recall. It may not  
17 be, but that's what I recall.

18 Q. Okay. So you were originally engaged by  
19 the Texas NAACP, but then you were later engaged by  
15:12:51 20 the Southern Coalition for Social Justice in the  
21 same case?

22 A. I guess I -- like you said, I look at  
23 who pays me, I guess.

24 Q. And I'm not complaining.

25 A. Right.

1 Q. I'm just trying to understand.

2 A. Right. And so --

3 Q. What -- what -- you were -- your  
4 engagements -- one engagement ended before the next  
15:13:03 5 one began?

6 A. Yes. Yes. One was just specifically --  
7 if you notice, one is in 2011, and then the other is  
8 2013, three years later.

9 Q. Okay. So that -- that case was still  
15:13:15 10 lingering in some fashion and somebody else went on  
11 and hired you?

12 A. Yes.

13 Q. Got you.

14 What was the nature of your -- well, the  
15 Alabama Democratic Conference -- you developed plans  
16 for the State of Alabama for the ADC versus Alabama  
17 court case. You -- you know, you say you developed  
18 them in -- for the chro -- geographic State of  
19 Alabama. You did not actually do work for the  
15:13:49 20 entity State of Alabama, correct?

21 MS. HARLESS: Objection to form.

22 BY MR. BOYNTON:

23 Q. You were hired by the Alabama Democratic  
24 Conference, correct?

15:13:57 25 A. Correct.

1 Q. You were not hired by -- and that was  
2 the plaintiff in the case, correct?

3 A. Correct.

4 Q. And that was not the defendant --

15:14:00 5 A. One of the plaintiffs.

6 Q. -- Alabama in the case?

7 A. Correct.

8 Q. And the nature of the work you did in  
9 that case was what?

15:14:06 10 A. In -- initially the Court wanted to see  
11 examples of how districts were, in essence, packed  
12 really. And so they turned to me to come up with a  
13 series of maps that would show that. So I obtained  
14 the data and began to create a series of thematic  
15 maps that would highlight how they kind of split  
16 VTDs and actually plu -- packed African Americans  
17 inside many of the districts.

18 Q. Did -- go ahead.

19 A. Oh.

15:14:42 20 Q. Sorry.

21 A. Then I was just going to follow on and  
22 say that then they came back to me, and this was  
23 over I know a year per -- period of time or  
24 something, to develop the state senate and house  
15:14:54 25 plans.

1 Q. In that case you provided deposition  
2 testimony; is that correct?

3 A. I provided a deposition. No testimony.

4 Q. Okay. I'm -- I'm probably confusing  
15: 15: 05 5 you. You were deposed in that case?

6 A. Yes.

7 Q. And so in the context of being deposed  
8 you were on the record and asked oral questions to  
9 which you provided answers under oath?

15: 15: 16 10 A. Yes.

11 Q. But you did not go to trial in that  
12 matter?

13 A. Correct.

14 Q. I understand. Okay.

15: 15: 22 15 What do you recall being the -- the  
16 primary issue in that Alabama case?

17 A. They found that the -- several of the  
18 state senate and state house were what I would say  
19 packed unconstitutionally, gerrymandered -- racially  
15: 15: 50 20 gerrymandered. And so they turned it back to the  
21 State and said that, "You have to redraw these  
22 districts."

23 Q. Now, did you provide testimony as to  
24 whether it was in fact gerrymandered or --

15: 16: 01 25 A. No. No.

1 Q. Solely as to the -- the -- the remedial  
2 maps?

3 A. Exactly. Correct.

4 Q. Okay. With respect to your involvement  
15: 16: 09 5 in City of Greensboro versus Guilford -- what was  
6 the nature of that case? To your understanding, of  
7 course.

8 A. Correct. Correct. I -- one of the  
9 things that I provided was, of course, what I call a  
15: 16: 26 10 comparative analysis. And anytime I say that that  
11 means I compared one plan to -- to another plan,  
12 usually a plan that someone submitted and wasn't  
13 approved with the approved plan. But I also looked  
14 at partisan performances, meaning how did they  
15: 16: 46 15 configure the district according to a particular  
16 party.

17 Q. DOR, for example?

18 A. Right. DOR. Exactly.

19 And then incumbent analysis, which was  
15: 16: 54 20 -- in this particular case I believe once I analyzed  
21 it they ended up actually doing what's called  
22 double-bunking or pairing up only the Democrats  
23 together and they didn't pair the Republicans  
24 together in multiple districts.

15: 17: 11 25 Q. On whose behalf did you provide

1       testimony in the case? I understand you were paid  
2       by the SCSJ, but on whose behalf did you provide  
3       testimony?

4           A. I'm not sure if it was the NAACP, but I  
15:17:28 5       know that the Southern Coalition for Social Justice  
6       was -- was the one that paid me.

7           Q. And it looks like the matter was City  
8       versus County of a Board of Elections. Do you  
9       recall anything other than engagement by Southern  
15:17:47 10      Coalition for Social Justice in terms of the -- the  
11       -- the -- the scope of your representation?

12           A. No. No.

13           Q. Okay. Perez v. Abbott, Texas NAACP,  
14       2017. What was the nature of that case, to your  
15:18:02 15       understanding?

16           A. Once again comparative analysis of  
17       different districting plans, but this added a -- an  
18       -- a -- an additional aspect of looking at  
19       communities of interest.

15:18:19 20           The counsel at that time said that the  
21       courts wanted to see -- see something more than just  
22       pure stats. And so what I did was I looked at  
23       communities of interest in -- it was in the context  
24       of why these districts should be connected or  
15:18:36 25       configured the way they are of the proposed -- some

1 proposed districts. And so in the context of that I  
2 looked at school district areas to see if they were  
3 within the school districts. I looked at media  
4 markets. I looked at transportation. And overall I  
15: 18: 54 5 found that there was a commonality amongst these --  
6 the districts that would enable them to actually be  
7 together or configured the way they were configured.

8 Q. Did you generate your own maps in that  
9 case?

15: 19: 06 10 A. No. Just looked at someone else's.

11 Q. And that's the same for the Greensboro  
12 case?

13 A. Yes.

14 Q. Okay. And then Southern Coalition for  
15 Social Justice, 2018, North Carolina State  
16 Conference of NAACP Branches v. Lewis, Wake County  
17 Superior Court case. What was the nature of your  
18 engagement in that matter?

19 A. There were two districts that the courts  
15: 19: 32 20 found to be racially gerrymandered districts. And  
21 the legislature, I believe, in this particular case,  
22 I think, created a -- a -- a plan to correct these  
23 racially gerrymandered districts. And in doing so  
24 they redrew all of the districts inside Wake.

25 Q. Okay.

1           A.     And what my purpose was, to show that  
2 they did not have to redraw all of the districts or  
3 what you call nonadjacent districts, meaning that  
4 clearly you have to redraw the districts that are  
15: 20: 19 5 adjacent, because anytime you change a district you  
6 change two, but they didn't have to redraw all of  
7 the districts. And, of course, it -- you know, the  
8 -- the -- it was stated that they drew a district to  
9 get some sort of benefit to -- to that.

15: 20: 34 10           And so what I did was I went through and  
11 corrected the racially gerrymandered districts not  
12 touching any of the -- the nonadjacent districts,  
13 and -- and kind of walked through in -- in my report  
14 how that could be done.

15: 20: 54 15           Q.     And that's a state court case, I  
16 presume.

17           A.     Yes, I believe so.

18           Q.     And then we -- we come to Latasha  
19 Holloway v. City of Virginia Beach. Is this your  
15: 21: 04 20 first engagement in -- involving Campaign Legal  
21 Center, sir?

22           A.     Yes.

23           Q.     Okay. Without getting into  
24 attorney-client communications, how did -- or  
15: 21: 12 25 litigation work product, how did you come to be

1 involved in this case?

2 A. I received a phone call from someone who  
3 who's an attorney on the CLC asking if --

4 MS. HARLESS: I -- I just want to --

15: 21: 28 5 BY MR. BOYNTON:

6 Q. I don't need the context.

7 MS. HARLESS: Yeah.

8 BY MR. BOYNTON:

9 Q. I just -- yeah. You received a phone  
15: 21: 33 10 call from an attorney --

11 A. Right.

12 Q. -- that was affiliated with CLC. That  
13 --

14 A. That's right.

15: 21: 37 15 Q. That's fine --

16 A. Yeah.

17 Q. -- as far as it goes.

18 Do you recall when you were en --  
19 engaged for this matter originally?

20 A. Last year was the first time that I put  
21 together some preliminary plans, or plans basically  
22 if you will, of configurations for the city.

23 Q. Do you recall in what month of 2018 you  
24 were originally retained?

25 A. I would say -- I don't have it there. I

1 would say probably the fall. And that meant  
2 probably September, October, November. Somewhere  
3 around that --

4 Q. Understood.

15: 22: 23 5 A. -- period of time. Yeah.

6 Q. And I understand --

7 A. Yeah.

8 Q. -- your basis for compensation in this  
9 case is \$180 an hour.

15: 22: 29 10 A. Yes.

11 Q. Does that change based upon providing  
12 testimony or going to court or traveling?

13 A. I -- I don't think I included that this  
14 time. I do include it most times, but I don't think  
15 I did include a different rate.

16 Q. So 180 an hour when you're working for  
17 the --

18 A. Right.

19 Q. -- for this case?

15: 22: 46 20 A. Correct. I -- I think that's the  
21 contract that I looked at.

22 Q. Was there any advance payment or fixed  
23 fee for the generation of --

24 A. No.

15: 22: 54 25 Q. -- a map at any point in time?

1 A. No. No.

2 Q. Okay.

3 A. That would be nice.

4 Q. Had you prepared a -- a -- a map for the  
15: 23: 07 5 purposes of -- of establishing what we will be  
6 talking about as Gingles precondition 1 prior to the  
7 Holloway case?

8 A. Have I --

9 MS. HARLESS: To -- hold on. To the  
15: 23: 18 10 extent you're asking him -- I just want to  
11 differentiate. To the extent you're asking him  
12 about a draft expert report, I'm going to instruct  
13 him not to answer that.

14 MR. BOYNTON: I'm just asking him --

15 BY MR. BOYNTON:

16 Q. Outside of the Holloway case have you  
17 ever previously been engaged for the purpose of  
18 providing expert opinions or testimonies in regard  
19 to establishing the Gingles 1 factor in any court?

15: 23: 39 20 A. Outside the Holloway case?

21 Q. Yes.

22 A. No.

23 You're -- you're saying now -- could you  
24 repeat that just in case? I want to make sure that  
15: 23: 47 25 I --

1 Q. Sure. I'll be happy to. My  
2 understanding is your testimony in the Latasha  
3 Holloway case, the case that we're having the  
4 deposition --

15: 23: 55 A. Correct.

6 Q. -- in today, relates to your opinions  
7 that one or more maps can be drawn in the city of  
8 Virginia Beach that satisfy Gingles precondition  
9 number 1, correct?

15: 24: 06 10 A. Correct.

11 Q. Have you been retained to provide  
12 testimony of that ilk -- of that scope in a case  
13 other than the Latasha Holloway case?

14 A. Oh, I see what you're -- you're getting  
15 to.

16 No.

17 Q. What portion of your -- or I should say  
18 what portion of CensusChannel, LLC's work is what I  
19 will describe as litigation consulting at this point  
20 in 2019?

21 A. As far as the percentage of --

22 Q. Percentage of revenue.

23 A. -- revenue?

24 Q. Litigation consulting versus other  
25 sources.

1           A.     I would probably say maybe -- at this  
2 particular moment 20 percent probably.

3           Q.     Ha -- has that increased or decreased  
4 over the years?

15: 25: 33 5           A.     It -- the percentage?

6           Q.     The proportion of your work --

7           A.     For?

8           Q.     -- in percentage terms that is for  
9 litigation consulting.

15: 25: 41 10          A.     It depends on the -- the timeframe,  
11 meaning that -- the purpose of my master's was to  
12 expand beyond just pure redistricting. And that's  
13 what has occurred. It took a -- it took a -- a year  
14 or so to actually get going, but it -- it expands.

15: 26: 06 15          So restricting would not take up a sizable amount.  
16 That would expand to other areas.

17          Q.     One of those areas being litigation  
18 consulting?

19          A.     Yes. Yes. I mean --

15: 26: 15 20          Q.     Are there other significant practice  
21 areas that you have gleaned or gained since 2016?

22          A.     Yes. Yes.

23          Q.     What are those?

24          A.     For example, I have a couple of clients.  
15: 26: 27 25          The NAACP is one client. All of it's related to

1 mapping or demographics.

2 And then another client, Southern Echo,  
3 which is related to mapping as well. More  
4 educational based.

15: 26: 43 5 I just picked up a third client, the  
6 Legal Defense Fund, which I guess is pertaining to  
7 redistricting, although they're looking at other  
8 things as -- demographic population expansions.  
9 Things of that nature.

15: 26: 55 10 Q. And when you say Legal Defense Fund are  
11 you also referring to the NAACP?

12 A. Yes. The -- yeah. Okay.

13 Q. But that's a different client than the  
14 -- the ones --

15: 27: 04 15 A. That's correct.

16 Q. -- you mentioned a moment ago?

17 A. They're two separate entities. That's  
18 right.

19 Q. Okay. Since 2016 has the percentage of  
15: 27: 13 20 your practice or work that is represented by  
21 litigation consulting increased or decreased?

22 A. The percentage has decreased overall.  
23 And that was the purpose is that it would decrease  
24 and I wouldn't be dependent upon that.

15: 27: 32 25 Q. Dependent upon litigation consulting?

1 A. Exactly.

2 Q. Okay.

3 A. Exactly.

4 Q. Do you believe you were dependent upon  
15: 27: 39 5 litigation consulting prior to 2016?

6 A. When you say -- and -- and probably I  
7 wouldn't -- I shouldn't have said dependent upon. I  
8 would say that was probably my specialty and I  
9 focused on that. Specifically during the period of  
15: 27: 51 10 time where I was getting my master's, that's what I  
11 focused a lot -- a lot of my energy on.

12 But besides that I would say that, as I  
13 said before, the plan that I had was to actually  
14 expand -- expand beyond my redistricting litigation  
15: 28: 15 15 and add on -- on other demographic and  
16 mapping-related projects, and that's what has  
17 occurred.

18 Q. And I don't want to take but so much  
19 time on it, but if you would turn then to the  
15: 28: 34 20 earlier portions of your career. And you were  
21 educated at the Virginia Tech University?

22 A. Yes.

23 Q. Virginia Polytechnic Institute and State  
24 University I believe is the full name.

15: 28: 47 25 A. That I think is the cor -- the -- still

1 the legal name, I believe.

2 Q. And you received your --

3 MS. HARLESS: Sorry. I'm sorry. Are  
4 you on page 28, just to clarify?

15:28:54 5 MR. BOYNTON: Yeah. I -- I jumped back  
6 to 28. I'm sorry.

7 BY MR. BOYNTON:

8 Q. You received your bachelor's of science  
9 degree in electrical engineering in 1982, correct?

15:29:00 10 A. Correct.

11 Q. And what prompted you to -- at least  
12 initially by -- by education to become an electrical  
13 engineer?

14 A. I loved designing things, and so  
15 engineering became a natural career to pursue  
16 because I always loved putting things together and  
17 creating things. And so in high school I took a  
18 couple of electronic courses that led me to actually  
19 I think expand my electronics knowledge.

15:29:34 20 Q. What -- what happened between 1982 and  
21 1991 to cause you to transition from engineering to  
22 demographics or -- or mapping?

23 A. Right. And -- and I mentioned this, but  
24 I'll -- I'll repeat. The -- I worked for Teledyne,  
15:29:55 25 Inc., which was, as I said, a manufacturing

1 company -- a division of -- of -- of Teledyne, Inc.,  
2 for a few years.

3 And then I worked for a government  
4 consulting firm, EER Systems -- excuse me -- eng --  
15: 30: 11 5 engineering and economics research, a government  
6 contractor. And then I received, like I said, the  
7 entrepreneurial bug where I wanted to be in business  
8 for myself, and so I started with another individual  
9 and -- and a silent partner a computer training  
15: 30: 30 10 center called the Executive -- Executive Training  
11 Center. And we had -- I don't need to go into  
12 detail, but after a couple of years the -- like I  
13 said, the recession was kicking in. One of the  
14 things that they -- ha -- what occurs with companies  
15: 30: 53 15 is they cut back on training. That is one of the  
16 first things they cut back on. So we got hurt and  
17 so we had to close the doors.

18 I wanted to continue to be in somewhat  
19 of the entrepreneurial world and so consulting  
15: 31: 07 20 became that logical choice.

21 After a -- a -- a -- a -- we closed our  
22 doors I began looking for computer consulting work  
23 and landed a contract with Norfolk State University  
24 at the School of Education's computer lab as their  
15: 31: 28 25 lab manager, setting up network systems, helping

1 people with problems throughout the -- the -- the  
2 department.

3 And then someone who was -- who was  
4 affiliated with the pro -- the -- the department  
15: 31: 43 5 came to me and said there's a project in political  
6 science that I would be suited for. I went over and  
7 -- and talked to the co-directors of The  
8 Redistricting Research Project and they hired me.  
9 And so my life took off in a completely different  
15: 32: 00 10 direction after that.

11 Q. Where would you say your pre-1991  
12 background in demographics or mapping came from?

13 A. Just experience really. Dealing with  
14 census data. What -- you know, in redistricting you  
15: 32: 18 15 have to deal with census data and understanding how  
16 to use it and utilize it and process and analysis,  
17 access it. And so I was forced and compelled to  
18 actually understand that.

19 And, of course, you -- you know, you --  
15: 32: 32 20 you pick up manuals, read -- you know, Census  
21 Bureau -- I focused on census data a lot. And --  
22 and the census has a plethora of -- of manuals and  
23 -- and technical documentation you can turn to.

24 Q. The -- the first electoral map you  
15: 32: 49 25 produced was in conjunction with your work at

1 Norfolk State University in 1991 to 1999; is that  
2 correct?

3 A. Correct. Correct.

4 Q. Is there any specialized training as to  
15: 32: 59 5 the -- the -- the generation of -- of electoral maps  
6 separate and apart from what we've talked about  
7 today that you had as of 1999 -- 1991 or earlier?

8 A. No, no training in electoral maps  
9 creation.

15: 33: 24 10 Utilizing the geographic information  
11 system, which really started to occur in the '90  
12 round, required -- began to require a person with a  
13 technical background. So I think I was suited for  
14 the map-drawing aspects -- not the political  
15 science, but the map-drawing aspects because sort of  
16 the level of experts split at that particular period  
17 of time. You had political science doing many  
18 things and attorneys, but at that particular time it  
19 split into political science and then map drawing  
15: 34: 00 20 once GIS technology took off in the '90s.

21 Q. Okay. Thank you.

22 A. Uh-huh.

23 MR. BOYNTON: I'm going to suggest --  
24 we're kind of done with the résumé portion of this.  
15: 34: 09 25 It's been about an hour and a half. Would it be

1 good to take about a five-minute break?

2 THE DEPONENT: Yes.

3 MR. BOYNTON: Okay.

4 THE DEPONENT: Appreciate that.

15: 34: 15 5 THE VIDEOGRAPHER: We're off record at  
6 3:33 p.m.

7 (Recess)

8 THE VIDEOGRAPHER: We are back on record  
9 at 3:45 p.m.

15: 46: 56 10 BY MR. BOYNTON:

11 Q. Mr. Fairfax, we are back on the record.  
12 Let's, if we can, turn our attention to  
13 your initial report dated July 15th, 2019, that I  
14 believe you have in front of you as Exhibit 2. Is  
15 that correct?

16 A. That's correct.

17 Q. I'd ask you just as a preliminary matter  
18 to kind of flip through it and make sure it looks  
19 like a complete copy of the report that you  
15: 47: 19 20 provided. I'm not asking you to give me a close  
21 reading but just to identify that it appears to be  
22 yours and complete.

23 A. Yes.

24 Q. Okay. Thank you.

15: 48: 17 25 Looking at the very beginning, or page 2

1 I guess, of your report, would you describe for me  
2 the -- the -- in your own words the scope of your  
3 representation initially in this matter?

4 A. What I was asked to do or --

15: 48: 33

5 Q. Yes. Exactly.

6 A. Okay. I -- I was asked to determine  
7 whether one or more majority Hispanic, black and  
8 Asian combined districts could be created in the  
9 city of Virginia Beach.

10 Q. All right.

11 A. And then I was also asked to look at  
12 past and recent demographics in the city.

13 Q. Okay. In terms of reviewing past and  
14 recent demographics pertaining to the city, what did  
15 you understand the purpose of that inquiry to be?

16 A. I wasn't given any rationale for it.

17 Q. Does it inform the -- the first task, if  
18 we call that the second task?

19 A. I would -- I -- I would potentially do  
20 some type of analysis for socioeconomic data  
21 potentially.

22 Q. Well, you -- you were not retained to  
23 provide expert opinions regarding what we will call  
24 Gingles prong 2 or 3, correct?

15: 49: 31

25 A. No. No.

1 Q. You are not offering any opinions in  
2 this case as to political co -- co -- cohesion,  
3 correct?

4 A. Correct.

15:49:35 5 Q. You were told that the -- the group you  
6 were asked to analyze was Latino or Hispanic, black  
7 and Asian combined districts, correct?

8 A. Correct.

9 Q. That was -- that was in the mission  
15:49:47 10 statement from the beginning?

11 A. Correct.

12 Q. Okay. Were you retained to provide  
13 expert opinions in regard to the what -- what we  
14 understand to be the totality of the circumstances  
15:49:59 15 analysis?

16 A. No.

17 Q. Okay. Are you intending to provide  
18 opinions in this case as regard -- in regards to  
19 totality of the circumstances analysis under  
15:50:08 20 Gingles?

21 A. No.

22 Q. You've obviously looked at a lot of  
23 jurisdictions around the country in -- in your work  
24 since 1991.

15:50:23 25 A. (Moved head up and down.)

1 Q. Have you done demographic analytical  
2 work in regard to the District of Columbia?

3 A. D.C.?

4 Q. (Moved head up and down.)

15: 50: 36 5 A. I -- I know I've looked at D.C., but --  
6 but I'm trying to think any particular project, but  
7 I have looked at it. I can't recall a specific, you  
8 know, contract or project on D.C.

9 Q. What about the Baltimore area?

15: 50: 58 10 A. In the context I guess of drawing or  
11 developing plans for the -- in the state in what --

12 Q. The state -- the whole state of  
13 Maryland?

14 A. Yeah. Yeah. I mean, Baltimore, of  
15 course, was included. And, of course, there's a  
16 district that exists, you know, in the city or  
17 around the city.

18 Q. And you -- obviously from your special  
19 master work you've looked at the Miami-Dade area; is  
20 that correct?

21 A. Uh-huh. Yes.

22 Q. What other highly populated areas have  
23 you looked at nationally as part of your demographic  
24 work? Largest hundred cities.

15: 51: 47 25 A. I know in -- in Florida -- I looked at

1 socioeconomic aspects in several cities and counties  
2 in Florida, and several of them were large.

3 Q. Texas as well, I presume.

4 A. Texas, the -- the -- of course, the  
15: 52: 15 5 projections for the districts in Texas.

6 Q. What specific cities did you look at  
7 with any degree of granularity?

8 A. I know there was the cities around or --  
9 Harris County.

15: 52: 28 10 Q. Is that Dallas?

11 A. Fort -- yeah. Dallas, yes.

12 Q. I'm asking, so...

13 MR. HEBERT: It's Houston.

14 A. It's Houston. Okay. Good. Houston.

15: 52: 38 15 There you go.

16 The other one as well. There -- there  
17 are two big hubs, and I can't remember the counties.  
18 It's -- it's...

19 BY MR. BOYNTON:

15: 52: 45 20 Q. You recall looking at the Dallas --

21 A. Yes.

22 Q. -- metro area?

23 A. Yes.

24 Q. Okay. Well, we can talk about metro  
15: 52: 50 25 areas.

1 A. Yeah.

2 Q. I don't need exact county names. I'm --  
3 I'm more focused, actually, on the metro areas. I  
4 think people will understand that better going  
15: 52: 55 5 forward.

6 A. Right.

7 Q. What other major metro areas have you  
8 reviewed or -- or studied as part of your  
9 demographic work?

15: 53: 07 10 A. I looked at Los Angeles. I looked at  
11 the city of Los -- now, are you referring to  
12 redistricting or any -- any redistricting?

13 Q. Anything that would allow you to look at  
14 population --

15 A. Yeah. Yeah.

16 Q. -- location trends.

17 A. Yeah. Well, I mean, if -- if that's the  
18 case, then you have New York City and you have Los  
19 Angeles. You have, like you said, Texas. Atlanta.  
15: 53: 53 20 You know, several places in -- in Florida. You  
21 know, Miami, Jacksonville.

22 Q. The Raleigh-Durham area in North  
23 Carolina?

24 A. Raleigh-Durham area. Yes.

15: 54: 06 25 Q. Charlotte in North Carolina?

1 A. Wake, which is big. And Charlotte,  
2 that's right.

3 Q. Anywhere in Alabama?

4 A. Yes. Mississippi. Alabama and  
15: 54: 22 5 Mississippi. I'm think -- thinking of the cities  
6 there. I guess Birmingham would be Alabama.

7 Q. Louisiana?

8 A. Louisiana.

9 Q. Large cities there?

10 A. That's right. New Orleans. Baton  
15: 54: 36 11 Rouge.

12 Q. Okay.

13 A. Uh-huh. Yes.

14 Q. So a -- a significant number of the --  
15: 54: 43 15 the top hundred metro -- major metropolitan areas in  
16 the country?

17 A. Correct.

18 Q. What's your familiarity with other  
19 unique cities within the Hampton Roads area?

20 A. MS. HARLESS: Objection to form.

21 BY MR. BOYNTON:

22 Q. In terms -- I can rephrase.

23 A. What -- what demographic analysis have  
24 you done in regard to the specific cities in the  
15: 55: 00 25 Hampton Roads area?

1           A.     I -- I've looked at the population  
2 increase in the Hampton Roads area, meaning that in  
3 the context of how population changed from 2000 to  
4 2010, in order to show deviation percentages of --  
15: 55: 28 5 of particular districts and their lack thereof, in  
6 -- increase or decrease in population.

7           Q.     And has that been with respect to racial  
8 or ethnicity demographics as well?

9           A.     It was -- now, mostly just the  
15: 55: 43 10 population deviations.

11          Q.     General growth?

12          A.     General growth, yeah.

13          Q.     Not -- not trends as to African American  
14 or --

15: 55: 50 15       A.     Correct.

16          Q.     -- or Hispanic or Asian locations?

17          A.     Correct. Correct. Not that.

18          Q.     Anything specific to political  
19 affiliation in the Hampton Roads area?

15: 55: 58 20       A.     No. Well, in the context of I worked --  
21 and this isn't included in my résumé. I should have  
22 included it -- with the Bethune-Hill case.

23          Q.     Just tell me about that case.

24          A.     Yes.

15: 56: 14 25       Q.     That's probably the easiest way.

1 What --

2 A. Right.

3 Q. What do you understand that case to have  
4 been about?

15: 56: 17 5 A. Right. There -- there were 11  
6 unconstitutional districts, house districts, and the  
7 courts directed the State to redraw those districts.  
8 And so for the NAACP I developed a plan that  
9 corrected the racial gerrymanders.

15: 56: 36 10 Q. Was your plan adopted by the court?

11 A. No.

12 Q. It was submitted to the court, though?

13 A. Yes.

14 Q. What -- what plan was adopted, to your  
15 knowledge?

16 A. From -- from my understanding, you know,  
17 they hired the special masters. And the special  
18 masters received input from various individuals,  
19 including NAACP -- various organizations, rather.

15: 56: 58 20 And he developed a plan, but I don't think they  
21 adopted that plan. They adopted a -- an alternative  
22 plan to what the special masters I think even  
23 created. That's my understanding.

24 Q. What -- just to kind of track the --  
15: 57: 14 25 your involvement, you were hired by the NAACP to

1 prepare a -- a set of maps to be remedial in the  
2 context of that case?

3 A. Correct.

4 Q. And they were submitted under the -- the  
15: 57: 25 5 name of the NAACP as suggestions to the court?

6 A. Correct.

7 Q. And then the court obviously makes its  
8 choice for whatever reasons.

9 Were you given any reason as to why the  
15: 57: 35 10 plans that you prepared on behalf of the NAACP were  
11 not adopted in that context?

12 A. Yes. And at the time I didn't -- I  
13 should have realized this because I worked on the --  
14 the court case on Wake County. One of the districts  
15: 57: 53 15 that had to be changed was a nonadjacent district.

16 And so that eliminated that plan because I did touch  
17 a nonadjacent district.

18 Q. So the Court's desire was to not touch  
19 nonadjacent districts and you happened to change a  
15: 58: 10 20 nonadjacent district?

21 A. Now, when you say the Court's --

22 Q. I -- I -- I --

23 A. -- the -- the special master --

24 Q. Yeah.

15: 58: 13 25 A. -- is what you're saying?

1 Q. I apologize. Yeah. And I -- that was a  
2 tough question anyway.

3 A. Yeah.

4 Q. Let me see if I can rephrase it.

15: 58: 18 5 A. Right.

6 Q. The report that you prepared for the  
7 NAACP that was submitted to the special master or to  
8 the court changed a noncontiguous district, correct?

9 MS. HARLESS: Objection to form.

15: 58: 31 10 A. Nonadjacent.

11 BY MR. BOYNTON:

12 Q. You can answer.

13 A. A nonadjacent district.

14 Q. I'm sorry. A nonadjacent district.

15 A. Yes.

16 Q. Thank you for clarifying.

17 A. Uh-huh.

18 Q. And the court -- the -- the -- the plan  
19 ultimately adopted by the court did not change any  
15: 58: 42 20 nonadjacent districts. Is that your understanding?

21 A. Correct.

22 Q. Okay.

23 A. That's my understanding. Yes.

24 Q. Did you understand that the special  
15: 58: 50 25 master or the court was seeking to implement a plan

1       that did not change any nonadjacent districts?

2           A.     No.

3           Q.     It did not submit --

4           A.     I --

15:59:01 5           Q.     -- criteria to the -- to the --

6           A.     The --

7           Q.     -- folks who were providing plans?

8           A.     The -- the -- the criteria I had didn't  
9 include that.

15:59:08 10          Q.     What criteria did it include?

11          A.     Well, I mean, the normal traditional  
12 redistricting criteria; minimizing splits,  
13 compactness. There was a certain deviation  
14 percentage that they were looking for. And you had  
15 to develop a plan and not -- they were looking --  
16 and I can't re -- remember the wording, but they  
17 were looking, of course, to dilute -- not dilute  
18 minority voting strength.

19          Q.     I understand that the -- the -- the  
15:59:45 20 target for the reconfigured minority and majority  
21 districts was 51 or 52 percent, something less than  
22 the 55 that was found unconstitutional. I'm just  
23 asking for your understanding.

24          A.     Right, right, right. I -- I -- I don't  
15:59:55 25 know if there was a particular target in --

1 involved. I don't know if there was a target per  
2 se.

3 Q. Do you know if the court in that case  
4 was using the -- the HBA breakdown, the -- the  
16:00:07 5 Hispanic-black-Asian breakdown that's being applied  
6 in the -- or attempted to be applied in the Holloway  
7 case?

8 MS. HARLESS: Objection to form.

9 A. Yeah. I don't know that.

16:00:19 10 BY MR. BOYNTON:

11 Q. When you prepare -- prepared your  
12 districts did you target a certain percentage of  
13 minority population in the reconfigured districts?

14 A. No. Huh-uh. No.

16:00:28 15 Q. You -- you were just reconfiguring under  
16 traditional principles?

17 A. That's exactly right.

18 Q. Okay.

19 A. No. No. And not dilute minority voting  
16:00:37 20 strength.

21 Q. And -- and of -- in attempting to avoid  
22 diluting minority voting strength in the  
23 Bethune-Hill case --

24 A. Uh-huh.

16:00:48 25 Q. -- did you consider -- well, what ethnic

1 groups did you consider to be the minority  
2 population?

3 A. They were -- those districts were  
4 African American -- majority African American.

16:01:05 5 Yeah.

6 Q. Did you do a separate analysis or -- or  
7 consideration --

8 A. No.

16:01:12 9 Q. -- of -- of -- of Hispanic or Asian  
10 voters in that case?

11 A. No. Huh-uh.

12 Q. How did you treat mixed-race voters in  
13 that case?

14 A. I can't recall if I added them  
15 separately or just used the stand-alone -- I can't  
16 recall whether I -- whether I added them separately.

17 Q. Okay. Now, for purposes of our  
18 discussion here today when we use the term "HBA"  
19 what does that mean in your report?

16:01:54 20 A. It means Hispanic, black and Asian  
21 combined. And usually the term "CVAP" is after it  
22 if it's citizen voting age population.

23 Q. And -- and it -- I'm sorry. I didn't  
24 mean to talk over you.

25 A. Uh-huh.

1 Q. So we have citizen voting age  
2 population, correct?

3 A. Correct.

4 Q. We also then have just overall voting  
16:02:14 5 age population?

6 A. Correct.

7 Q. And then we have total population?

8 A. Right.

9 Q. And --

10 A. Correct.

11 Q. And the -- in normal circumstances C --  
12 CVAP is a subset of VAP, correct?

13 A. Correct.

14 Q. And then under normal circumstances VAP  
15 is a subset of total population, correct?

16 A. Correct.

17 Q. Okay. Do you recall what specific past  
18 and recent demographics you were asked to review  
19 pertaining to the city of Virginia Beach?

20 A. I wasn't given any direction on all of  
21 the various, you know, aspects/attributes, and so  
22 that I picked the ones that I thought would be  
23 appropriate from just past experience.

24 Q. Which ones did you pick?

16:03:09 25 A. I looked at -- for the -- comparing the

1 city's growth I looked at total population. Then,  
2 of course, I looked at the -- the three races;  
3 Hispanic, black and Asian, and then also white  
4 population for the city.

16:03:25 5 And then with socioeconomic data I  
6 picked the indices that I thought would give some  
7 sort of the social status or outcomes that are  
8 normally used, which are income, education, poverty.  
9 And then later on I think I used housing values as  
16:03:42 10 well.

11 Q. What were the indices you referred to  
12 for those four topics?

13 A. Now, say the --

14 Q. I -- I believe you said you referred to  
16:03:50 15 indices for income, education --

16 A. Right.

17 Q. -- property values and a fourth one that  
18 escapes me at the moment.

19 A. Right.

16:03:58 20 Q. Which specific indices did you look at  
21 for each of those -- those datasets?

22 A. Right. When I say indices I'm looking  
23 at the American Community Survey data. That's what  
24 I'm looking at. I'm not speaking of the indices  
16:04:12 25 like you would get at -- like the U.S. government

1 would have indices. I'm looking at the American  
2 Community Survey data variables.

3 Q. Okay. So you -- you looked, obviously,  
4 at the American Community Survey and all of its --

5 A. Correct.

6 Q. -- iterations for 2013 to 2017, correct?

7 A. Correct.

8 Q. You looked at the 2010 census data,  
9 correct?

16:04:31 10 A. Correct.

11 Q. You looked at other decennial census  
12 datas from past cycles, correct?

13 A. Correct.

14 Q. What other demographic data did you look  
16:04:39 15 at to inform your initial report?

16 A. I think you've covered -- the -- the  
17 1990 census you might have left out. I looked at  
18 the 2000 census, looked at the 2010 census for  
19 decennial census. And this came from the P.L. 94,

16:04:56 20 which is the standard redistricting file.

21 And then I looked at information  
22 pertaining to the American Community Survey, the  
23 five-year -- the 2013 to 2017 for the more recent  
24 one that would break it down to a -- a block le --  
16:05:15 25 group level.

1                   And then I believe I also looked at one  
2 time the 20 -- 2008 to 2012 five-year as well. And  
3 I --

4                   Q. Do -- do you recall if you looked at ACS  
16:05:27 5 2008 to 2012 dataset for your -- to inform your  
6 initial report or your rebuttal report or both?

7                   A. The initial report.

8                   Q. Okay.

9                   A. I -- I've got it in the initial report  
16:05:38 10 in one of the sections. And I can't recall it right  
11 now, but we'll probably go --

12                  Q. All right.

13                  A. -- go through it.

14                  Q. Anything else in terms of sources of  
16:05:47 15 demographic data to inform your initial report?

16                  A. I think that was it as far as the  
17 demographic data.

18                  Q. Okay. Any non-demographic data you  
19 considered in preparing your initial report?

16:06:07 20                  A. From the City's website I pulled down  
21 precinct shape files, in essence, that gave me the  
22 boundaries of precincts. I also pulled down the  
23 shape files for what they call subdivisions, and  
24 they're similar to neighborhoods. I pulled those  
16:06:22 25 down. The boundaries of the 1990 TIGER files -- I

1 accessed those from the census website.

2 Q. And before we go further what is a TIGER  
3 file?

4 A. Oh. It's the shape -- Topographically  
16:06:39 5 Integrated Geographic Encoding Referencing -- and  
6 they call it lines. They used it to call it lines.  
7 I'm sorry. Did you get...

8 Q. She did not or she did?

9 THE REPORTER: I'm fine. Go ahead.

10 BY MR. BOYNTON:

11 Q. Okay.

12 A. Okay. But it's -- it's TIGER's boundary  
13 file for block -- bloc, groups tract -- all their  
14 geographies use TIGER. And it's how they  
16:07:01 15 standardize the boundaries.

16 Q. Is that -- so you said 1990 data?

17 A. Yeah. That was 1990 for census tract.  
18 And then, of course, for 2010 -- the 2010 boundary  
19 files. And it comes with Maptitude. Caliper  
16:07:18 20 processes the census data and -- and puts it into a  
21 format -- their format, but it's the same data, just  
22 in their format.

23 Q. Anything else?

24 A. I'm trying to -- at -- at one period of  
16:07:43 25 time I think I requested the addresses from the City

1 for incumbents --

2 Q. Okay.

3 A. -- just to see where they were -- you  
4 know, they resided.

16:07:55 5 Q. Did that get incorporated into your  
6 initial report in any way?

7 A. No. I just wanted to look at them to  
8 see where they were included to -- in the map to  
9 make sure that -- that I could potentially create  
16:08:07 10 something if they were ex -- ex -- not excluded  
11 basically or were there any problems. And there  
12 wasn't a priority, but I always try to look at that  
13 to stop the -- a political argument let's say.

14 Q. But you didn't develop any specific maps  
16:08:23 15 to -- to accommodate for that?

16 A. No. No. No.

17 Q. Okay. And you -- you, I assume, had  
18 addresses for Ms. Holloway and Ms. Allen.

19 A. Yes. Yes. That's right. You -- I  
16:08:36 20 appreciate that. Yes, I had those addresses as  
21 well.

22 Q. I presume those were provided to you by  
23 counsel.

24 A. Yes.

16:08:42 25 Q. Okay. And so you didn't independently

1 determine where they lived, you just took whatever  
2 address was provided and punched it in?

3 A. Correct.

4 Q. Okay.

16:09:04 5 A. Did I mention the CVAP data? I'm  
6 looking at my report now. I think I mentioned that,  
7 the ACS data including the CVAP data.

8 Q. You're -- you're looking at -- I don't  
9 know if you're looking at it or not, but page 3  
16:09:24 10 tends to or -- or starts to explain several of the  
11 datasets were utilized and obtained from various  
12 government websites.

13 A. Right. Correct.

14 Q. If you would review pages 3 and 4 of  
16:09:34 15 your report.

16 A. Excuse me. Yes.

17 Q. Sitting here today, are there any other  
18 datasets or data that you downloaded or received or  
19 considered for your report other than the items  
16:10:00 20 you've testified to here today or the items listed  
21 on pages 3 and 4?

22 A. Not that I can think of right at this  
23 particular moment. It looks concise and complete.

24 Q. Well -- well, I'm staying on page --  
16:10:13 25 well, yeah -- page 4. I thought -- my understanding

1       is that the ACS dataset 23 -- 2013 through 2017 is  
2       only available at the block group level and not the  
3       block level; is that correct?

4           A.     That is correct.

16:10:24 5           Q.     And is that why to get to a block level  
6       -- we'll get there later, but you applied a  
7       disaggregation process?

8           A.     Correct.

16:10:36 9           Q.     And that process in -- in your original  
10      iteration was using the Maptitude software?

11          A.     Correct.

12          Q.     When you say estimated CVAP data was  
13       available for review at the district level what do  
14       you mean by district level?

16:11:00 15          A.     Well, district meaning the district.

16       It's -- once the disaggregation process was  
17       completed, then estimated data is available.

18          Q.     And when you say the district you mean  
19       the ten different --

16:11:11 20          A.     Yes.

21          Q.     -- districts you are setting forth as a  
22       proposed illustrative plan?

23          A.     Correct.

24          Q.     Okay. We get to the summary of your  
25       opinions and conclusions on page 4 and 5.

1 A. Yes.

2 Q. To -- to what level of scientific or  
3 statistical certainty do you render your opinions?

4 Is there a percentage factor you can put on them?

16:11:44 5 90 percent certain? How do you get there as a  
6 statistician or a demograph -- demographer in your  
7 world?

8 A. It -- I saw that in -- in Professor  
9 Morrison's opinion. And my -- my -- all of my  
16:12:06 10 opinions I -- I'm certain about.

11 Applying a -- a confidence level -- I  
12 don't know how you do that.

13 Q. Well, certain --

14 A. It's -- it's based upon subjective.

16:12:18 15 Q. Well, and that's what I'm getting to --

16 A. Yeah.

17 Q. -- is your certainty.

18 I mean, certain to me means a hundred  
19 percent, but I -- I understand to --

16:12:23 20 A. Yes.

21 Q. -- statisticians it may mean something  
22 different. So --

23 A. Right. Right.

24 Q. -- are you saying you're certain at a  
16:12:29 25 hundred-percent level or something else?

1 A. Well, you're never certain at a hundred  
2 percent because there's always exceptions to the  
3 rule, but -- I mean, if I was compelled to put a  
4 percentage, it -- I -- I would probably use the same  
16:12:47 5 percentage as he would -- he did, which is 95  
6 percent. But -- but it's all subjective. I can't  
7 -- I don't -- there's no quantification --

8 Q. I -- I --

9 A. -- of how you actually --

16:12:55 10 Q. I'm -- I'm sorry. I'm not trying to cut  
11 you off.

12 A. Yeah.

13 Q. I'm just asking for your definition as  
14 you employed it --

16:12:59 15 A. Right.

16 Q. -- in this report.

17 A. I -- I provide you my opinion and I  
18 provide it, you know, truthfully. And applying a --  
19 a -- a confidence level is difficult for me to do  
16:13:14 20 because you have to provide some quantification.

21 And I don't know how you do that without data.

22 Q. Okay. And -- and I'll -- I'll drill  
23 down on it in more detail in a -- in a bit, but you  
24 say thirty-one -- I'm on top of page 5 now for --

16:13:44 25 A. Okay.

1 Q. -- ease of following.

2 Thirty-one out of the hundred census  
3 tracts in Virginia Beach contain 54.4 percent of the  
4 HBA population.

16: 13: 56 5 Is -- is that -- again not using  
6 certainty, but is it roughly -- is that -- in --  
7 using lay person's terms, that roughly a third of  
8 the census tracts contain roughly half of the HBA  
9 population in Virginia Beach?

16: 14: 10 10 A. Right. Less than a third.

11 Q. Slightly less than a third?

12 A. (Moved head up and down.)

13 Q. 33 percent would --

14 A. Right.

16: 14: 14 15 Q. 33 districts would be --

16 A. Right.

17 Q. -- a third?

18 A. That's right.

19 Q. You -- you go further at the -- in the  
16: 14: 24 20 summary page to discuss Virginia Beach's white  
21 population outpaces the HBA population on several  
22 socioeconomic indicators according to ACS data.

23 Did you -- so did you compare simply the  
24 Virginia Beach white population versus other  
16: 14: 45 25 ethnicities' popu -- status under the ACS or did you

1 go to national averages or any other --  
2 A. No.  
3 Q. -- extrinsic source?  
4 A. No. Just in the city.  
16: 14: 55 5 Q. Comparing -- comparing different --  
6 across the ethnicities?  
7 A. That's correct.  
8 Q. Okay. What -- what data source or --  
9 and maybe what -- what location within the ACS data  
16: 15: 10 10 source did you determine that Hispanic, black and  
11 Asian persons had significant -- significantly  
12 higher percentages of persons with no high school  
13 education?  
14 A. This is using the five-year 2013 to 2017  
16: 15: 24 15 ACS.  
16 Q. And that's the same pervodian -- lower  
17 median household incomes?  
18 A. Right.  
19 Q. Okay.  
20 A. Uh-huh.  
21 Q. And -- and the same for higher  
22 below-poverty percentages?  
23 A. Correct.  
24 Q. And then we get kind of to the meat of  
16: 15: 42 25 the -- the -- the Gingles 1 test in your finding H.

1 And -- and you conclude, finally, the HBA citizen  
2 voting age population in the city of Virginia Beach  
3 is sufficiently large and geographically compact to  
4 enable the creation of two single-member majority  
16: 16: 01 5 Hispanic, black and Asian combined districts,  
6 correct?

7 A. That's correct.

8 Q. And in rendering that opinion were you  
9 asked to create one or two single-member majority  
16: 16: 10 10 districts?

11 A. Just asked to determine how many could  
12 be created, one or more.

13 Q. At -- at that point in time, meaning  
14 when your report came out, you only provided a -- a  
16: 16: 19 15 map with two districts, correct?

16 A. Correct.

17 Q. Did you provide any information  
18 supporting the map that was included in the amended  
19 complaint? And I'll put it in front of you so you  
16: 16: 33 20 do not have to guess.

21 A. Uh-huh.

22 Q. I'm showing you a document that was  
23 premarked Exhibit Fairfax 1 and page 18. And now  
24 you can flip through it, but I'm referring  
16: 16: 47 25 specifically to Appendix A --

1 A. Okay.

2 Q. -- which is on page 18.

3 A. Yes.

4 Q. Yes you've reviewed this --

16: 16: 56 5 A. This --

6 Q. -- or yes that's a map you prepared?

7 A. Excuse me. Yes, this is the map that I  
8 prepared.

9 Q. Okay. When -- when you prepared that  
16: 17: 03 10 map what was your task? What was the scope of work  
11 you were given to prepare that map?

12 A. It was very similar. To determine  
13 whether one or more districts could be created in  
14 the city.

16: 17: 15 15 Q. In each instance you prepared two, the  
16 -- the amended complaint version and then the  
17 initial report version, correct?

18 A. Correct.

16: 17: 26 20 Q. Is there any reason at that point in  
time you didn't provide a single-district map?

21 MS. HARLESS: Objection to form.

22 A. No, because many times I think if you  
23 can produce two, then you know you can create one.

24 BY MR. BOYNTON:

16: 17: 40 25 Q. And with respect to the map that you

1 prepared for the amended complaint that's identified  
2 as Exhib -- Appendix A to the amended complaint,  
3 Exhibit 1 here, you developed a map that had HBA  
4 CVAP, correct?

16:18:01 5 A. Correct.

6 Q. And that is -- I understand to be your  
7 estimate of the Hispanic, black and Asian citizen  
8 voting age population for those two proposed  
9 districts, correct?

16:18:13 10 A. Correct.

11 Q. And I also note that there are two red  
12 dots in Appendix A. What do those two red dots  
13 represent?

14 A. The location of the plaintiffs.

16:18:22 15 Q. Why did you include those on your map?

16 A. Because I was told by counsel that  
17 the --

18 MS. HARLESS: I --

19 BY MR. BOYNTON:

20 Q. I don't need the words. I -- but -- but  
21 without -- without revealing communications --

22 A. Right.

23 Q. -- why did you choose to include those?

24 A. I was told by counsel to see if they  
16:18:49 25 were included --

1 MS. HARLESS: Hold -- hold --

2 A. -- in the district.

3 MS. HARLESS: Yeah.

4 MR. BOYNTON: I -- I -- I don't know how  
16:18:53 5 to solve that, but I don't think it changes much  
6 either, so --

7 MR. HEBERT: Maybe if -- maybe if he  
8 just is asked what his understanding was of why he  
9 -- his understanding of why he --

10 MR. BOYNTON: I can -- I'm happy to  
11 rephrase that.

12 MR. HEBERT: -- included those maybe that  
13 will --

14 MR. BOYNTON: Sure.

15 MR. HEBERT: -- eliminate the problem.

16 BY MR. BOYNTON:

17 Q. What was your understanding for -- for  
18 why you were including the two dots on Appendix A?

19 A. To determine whether they resided in one  
16:19:17 20 of the two districts.

21 Q. And you concluded for purposes of the  
22 amended-complaint exhibit they did?

23 A. Yes.

24 Q. Okay. Do you recall, sitting here  
16:19:25 25 today, which dot represents which individual?

1 A. No.

2 Q. With respect to using HBA CVAP, why did  
3 you use HBA -- HBA CVAP for Appendix A of the  
4 amended complaint?

16:19:46 5 A. Why did I use the HBA citizen voting  
6 population?

7 Q. Correct.

8 A. Because I wanted to use the most  
9 conservative percentage to determine whether a  
16:19:58 10 majority or minority district existed.

11 Q. How is that the most conservative, for  
12 us non-demographers?

13 A. Because usually -- usually, as you --  
14 you pointed out very quickly, that as you move to  
16:20:11 15 voting age population normally that percentage would  
16 go up, specifically if you are in an area that has  
17 non-citizens, specifically Hispanic populations. So  
18 if there's somewhat of -- of a significant amount of  
19 Hispanic population, then a portion of that actually  
16:20:34 20 will be non-citizens, and so that decreases the HBA  
21 percentage when you go to CVAP.

22 Q. I see. And in -- in that iteration of  
23 -- of the map you prepared Plan C2, which is the  
24 northwesternmost district -- illustrative district  
16:20:56 25 is 50.13 HBA CVAP, correct?

1 A. I believe so.

2 Q. And under Plan D, which I understand to  
3 be the southeasterly proposed illustrative district,  
4 you came up with an HBA CVAP of 50.21, correct?

16: 21: 23 5 A. Correct.

6 Let me check something very quickly.

7 Q. Certainly.

8 A. Correct. C2 is the Western District,  
9 yes, and D is the middle district.

16: 21: 58 10 Q. Okay. Did -- did you use the  
11 methodology that you recite in your initial report  
12 to prepare the map that is Appendix A in the amended  
13 complaint?

14 A. Methodology as far as disaggregation?

16: 22: 13 15 Q. Yes.

16 A. I believe so. Yeah. I used Maptitude  
17 as far as the disaggregation.

18 Q. So this -- this Appendix A map in the  
19 amended complaint was drafted using block level data  
16: 22: 28 20 from the ACS 2013 through 2017 dataset disaggregated  
21 from block group levels, correct?

22 A. Correct. Let me rephrase that.

23 Q. Please.

24 A. Yes. I -- I -- I used block group level  
16: 22: 44 25 data. And this happened to be the 2012 to 2016 ACS

1 -- five-year ACS.

2 Q. So a different dataset?

3 A. Different dataset.

4 Q. Is -- is that -- is that the sole  
16: 22: 59 5 explanation for any differences in the map that is  
6 Appendix A on page 18 of the amended complaint  
7 versus the map you proposed in your original expert  
8 report?

9 MS. HARLESS: To -- to the extent you  
16: 23: 15 10 can answer that without revealing communications  
11 you've had with the attorneys.

12 A. Let me say that -- that when I developed  
13 this plan the only dataset that was available or the  
14 latest dataset was the 2012 and 2016 AC -- five-year  
16: 23: 42 15 ACS. That came out a few months later.

16 And the next part of this, when the  
17 litigation kicked in for the expert report, I  
18 inputted -- I realized that there's a new dataset.

19 And so I inputted or imported the -- the latest  
16: 24: 02 20 dataset and realized that the percentages decreased  
21 under 50 percent for this particular plan.

22 So that's why I had to modify the plan  
23 for a new plan, we -- using the new and latest  
24 dataset.

16: 24: 22 25

1 BY MR. BOYNTON:

2 Q. Was there anything other than the  
3 different dataset that -- let me rephrase.

4 Other than there being a different  
16: 24: 37 5 dataset as source data for the two maps we're  
6 referring to, were there any changes to your  
7 methodology preparing one map versus the second map?

8 A. Not that I recall. I think I used the  
9 same process. Yeah.

10 Q. But your goal was to come up with a map  
11 that showed HBA CVAP at 50.00 or more for two  
12 districts in Virginia Beach?

13 A. Correct. Correct.

14 Q. I -- I'm pretty sure I know the answer  
15 to this, but I need to confirm it. If you stay on  
16 the amended complaint --

17 A. Okay.

18 Q. -- and go to page 10. If you look at  
19 paragraph 51, there is reference to, "A statistical  
16: 25: 38 20 analysis demonstrates that voting patterns in the  
21 City Council elections are racially polarized, with  
22 Minority Voters consistently voting for a particular  
23 (often Black) candidate of choice. White bloc  
24 voting in support of their preferred candidates has  
16: 25: 56 25 repeatedly led to the defeat of candidates preferred

1 by Minority Voters."

2 Did you have any role in the preparation  
3 of that statistical analysis?

4 A. No.

16: 26: 03 5 Q. Okay. Did you do any analysis of  
6 whether voting in Virginia Beach is racially  
7 polarized?

8 A. No.

9 Q. Were you asked to look at -- well, no.

16: 26: 29 10 I'll rephrase it.

11 Did you -- in the preparation of your  
12 map that was used in the amended complaint did you  
13 look at seven-member districts versus ten-member  
14 districts?

16: 26: 40 15 A. I did only in the context of looking at  
16 the existing residency plan.

17 Q. You did not develop a illustrative plan  
18 at that time that showed one or more  
19 minority-majority districts or majority-minority  
16: 26: 55 20 districts in Virginia Beach for a seven-district  
21 system?

22 A. No. No.

23 Q. Okay. Were you asked or was -- was --  
24 was -- was your direction to look at ten-member  
16: 27: 07 25 districts or did you select that on your own?

1           A.     I was asked to look at ten districts  
2 only.

3           Q.     Were you asked to look at any other  
4 number of districts?

16: 27: 17    A.     No.

6           Q.     Turning your attention to page 14,  
7 paragraph 76, that paragraph says, "Minorities in  
8 Virginia Beach bear the effects of longstanding  
9 societal, economic, and educational discrimination,  
10 effects that are apparent in the areas of education,  
11 employment, housing, and health. Such  
12 discriminatory effects hinder Minority Voters'  
13 ability to participate effectively in the political  
14 process."

16: 28: 50    Did you have any role in analyzing the  
15 effects of any longstanding or otherwise societal,  
16 economic and/or educational discrimination?

17           A.     No.

18           Q.     You can set aside the amended complaint.

16: 29: 14    Thank you.

21           A.     Okay.

22           Q.     Returning to your report, I'd ask you to  
23 review specifically the Methodology section, section  
24 V, that starts on page 5 and -- and goes to the top  
16: 29: 38    of -- the end of the first paragraph on page 6.

1 MS. HARLESS: Do you want him to review  
2 the full section or just the --

3 MR. BOYNTON: No.

4 BY MR. BOYNTON:

16:30:06 5 Q. Just -- just page -- starting at V,

6 Methodology, on page 5 --

7 A. Uh-huh.

8 Q. -- concluding at the end -- the end of  
9 paragraph 1 on top of page 6 --

16:30:16 10 MS. HARLESS: Okay.

11 A. Okay.

12 BY MR. BOYNTON:

13 Q. -- to try to keep it in a manageable  
14 chunk.

16:30:19 15 A. Very good. Appreciate it.

16 Q. Chunk is a legal term.

17 A. I use it all the time.

18 Q. Just let me know when you've had an  
19 opportunity to review it.

16:30:54 20 A. I've -- I have perused it, so --

21 Q. Are you ready?

22 A. I'm ready.

23 Q. Okay.

24 A. I may have to reference it, but --

16:31:00 25 Q. Of course.

1                   Does that accurately represent your  
2 methodology for preparing your initial report --

3         A.     Yes.

4         Q.     -- to -- to the extent --

16: 31: 13 5         A.     And -- and --

6         Q.     -- to -- to the per -- to the point  
7 where I asked you to stop reading?

8         A.     Correct.

16: 31: 27 9         Q.     Okay. You -- you first analyzed the  
10 recent and past demographic and socioeconomic

11 profiles in the city of Virginia Beach, correct?

12         A.     Correct.

13                   Let me -- this probably wanted worded --

14 I didn't do any past socioeconomic. And so it

16: 31: 41 15 depended upon -- it may not be worded correctly.

16 Recent and past demographic, but not past

17 socioeconomic profiles, just to be clear.

18         Q.     It looks to me like the -- there are

19 four datasets referenced in the sense of the city's

16: 32: 02 20 HBA combined populations over the 1990, 2000 and

21 2010 decennial censuses, three there, plus you

22 looked at ACS 2013 to 2017, correct?

23         A.     Correct.

24         Q.     Okay. Why -- why is -- and -- and I'll

16: 32: 18 25 use the wording you used there subject to your

1 caveat today.

2 A. Okay.

3 Q. Why is the recent and past demographic  
4 and socioeconomic profile of the city of Virginia  
16: 32: 30 5 Beach im -- important to look at in informing your  
6 ultimate opinions in this case?

7 A. The recent -- or the past to the recent,  
8 actually, shows any type of trend of these HBA  
9 communities you could call them and where they're  
16: 32: 46 10 actually growing in the particular areas of the  
11 city. And so that's the reason why you want to see  
12 recent and past.

13 The other is to show citywide the trend  
14 in growth of Hispanic, black and Asian combined in  
16: 33: 03 15 the city in the context of -- of -- of -- of  
16 representation, if you will, whether they can  
17 sustain a majority-minority district.

18 Q. And -- and -- and so that paragraph at  
19 least refers to the size and the location of the  
16: 33: 25 20 minority communities in Virginia Beach over time?

21 A. Correct.

22 Q. Okay. The second paragraph. "I also  
23 reviewed socioeconomic data in order to observe  
24 various racial/ethnicity disparities and  
16: 33: 40 25 commonalities within the city at large as well as

1 | within the HBA communities."

What is the purpose of that review?

3           A.       The purpose of the commonalities, first,  
4       is to understand whether there was some common let's  
5       say communities of interest between the Hispanic,  
6       black and Asian combined population groups.

7 Q. When -- when you say communities of  
8 interest I think neighborhoods, but --

9 A. Right.

Q. -- that may be oversimplifying. What do you mean by the words "communities of interest"?

12 A. Right. And -- and communities of  
13 interest could mean neighborhoods.

14 Q. Well, what else could it mean?

15           A.     It could be income, education, poverty.  
16        It could be crime. It could be geographic, meaning  
17        that these are areas of interest for that particula  
18        community.

25 | And so the first part, the

1 commonalities, to show whether there is a  
2 commonality amongst those groups. And -- and there  
3 was.

4 Now, the second part, when you look at  
16: 35: 11 5 the disparity, that gives you an idea there -- there  
6 would be an interest in increasing income,  
7 decreasing poverty levels, increasing income --  
8 increasing the non -- decreasing the non-high school  
9 education percentages. So there is an -- an  
16: 35: 33 10 interest because of the disparity, and then you show  
11 there is a commonality amongst the particular group.

12 Q. So did you have data on socioeconomic  
13 factors on economic groups -- I'm sorry -- on HBA  
14 communities at a level more granular than the city  
16: 36: 01 15 at large?

16 A. The -- I also looked at the tracts that  
17 per -- made of the Hispanic, black and Asian --  
18 majority Hispanic, black and Asian tracts that made  
19 up the -- the districts or were included in the  
16: 36: 20 20 districts.

21 Q. From 2010?

22 A. No. The -- the --

23 Q. That's fine. I'm trying to --

24 A. The --

16: 36: 25 25 Q. And I'm not ask -- asking it well. And

1 so there's probably a better way for me to ask it --

2 A. Right.

3 Q. -- before you continue answering.

4 I'm trying to understand, A, what

16: 36: 33 5 specific socioeconomic data informed the specific  
6 districting that you proposed --

7 A. Right.

8 Q. -- and, second, how you used that data  
9 to inform it.

16: 36: 46 10 A. Right. Right. First, citywide -- I  
11 looked at whether there were commonalities citywide  
12 for each of the racial groups.

13 Q. Okay. Let's stop there.

14 A. Right. So --

16: 36: 58 15 Q. What commonalities did you identify?

16 A. So -- so, for example, the Hispanic,  
17 black and Asian population groups had significantly  
18 higher no high school education than white  
19 populations.

16: 37: 17 20 Q. Okay. And let's stop there.

21 A. Right.

22 Q. And then is that citywide data?

23 A. Citywide right now.

24 Q. Okay.

16: 37: 23 25 A. Right.

1 Q. Keep going.

2 A. Citywide. As well as lower median  
3 household incomes.

4 Q. Also citywide?

16: 37: 30 5 A. Citywide.

6 Q. Okay.

7 A. So we're at citywide.

8 And Hispanic and black -- not Asian.

9 Hispanic and black had higher below-poverty level  
16: 37: 41 10 percentages than the white persons in the city.

11 Citywide again.

12 But then later on I looked at those  
13 tracts that were majority Hispanic, black and Asian  
14 to see if there are any commonalities amongst the  
16: 37: 56 15 tracts. And so that's where you get into whether  
16 these communities, if you will, analogous to the  
17 census tracts would go together inside a particular  
18 district.

19 Q. So in terms of the commonalities at the  
16: 38: 12 20 tract level, what conclusions did you reach?

21 A. That there's a -- they mimic the same as  
22 the city -- citywide. So those HBA -- majority HBA  
23 census tracts tended to mimic those indicators at  
24 the citywide level for Hispanic, black and Asian.

16: 38: 31 25 Q. So you essentially extrapolated the data

1 down to a -- a -- a -- a census tract level from  
2 citywide?

3 A. Now, I looked at the data. I didn't do  
4 any extrapolation. I looked at the data at the  
16: 38: 45 5 tract level. So I looked at the majority Hispanic,  
6 black and Asian combined tracts and looked at it in  
7 the context of the same citywide indicators that I  
8 looked at, and they followed the same trends.

9 Q. So how did that inform or change your  
16: 39: 04 10 formation of these two illustrative districts?

11 A. Because I -- I -- I used it from the  
12 context of communities of interest. I used it from  
13 the context of -- of -- of including those areas  
14 inside the same district, so -- because they had  
16: 39: 35 15 similar socioeconomic status or indicators.

16 Q. You -- you treated them as de facto  
17 neighborhoods?

18 A. Communities.

19 Q. Communities. Okay.

16: 39: 44 20 A. Yeah. Yeah.

21 Q. And did you have tract-level data that  
22 separated out for Hispanic versus black versus Asian  
23 populations?

24 A. No. That's why I used the majority  
16: 39: 58 25 Hispanic, black and Asian combined. So I knew which

1 ones were Hispanic, black -- majority Hispanic,  
2 black and Asian combined, but I didn't know the  
3 specifics of the income, education and poverty for  
4 each of the different races. So I used the whole as  
16: 40: 16 5 the indicator, meaning the community as the  
6 indicator.

7 Q. But it's solely to inform the analysis  
8 of districts under Gingles 1 not to provide  
9 testimony or evidence as to cohesion?

16: 40: 33 10 A. Oh, no. No. Yeah. No, not to provide  
11 cohesion.

12 Now, I don't know who else may take and  
13 -- and say something on my report, but I'm --

14 Q. I --

16: 40: 46 15 A. -- I'm not there.

16 Q. I just care what you say at --

17 A. Right.

18 Q. -- this --

19 A. Right.

16: 40: 49 20 Q. -- at this moment in time.

21 A. Right.

22 Q. Tomorrow I'll care what somebody else  
23 says.

24 A. Right.

16: 40: 54 25 Q. Did you look at actual neighborhoods in

1 -- in drawing your maps?

2 A. The -- the subdivisions reflect the  
3 neighborhoods, and so that's what I downloaded from  
4 the city's website. And so there, of course, was an  
16: 41: 19 5 attempt to not split neighborhoods and specifically  
6 ensure that those Hispan -- the HBA neighborhoods  
7 were included in the districts because they carried  
8 on the same indicators.

9 Q. But, sitting here today, can you name a  
16: 41: 35 10 neighborhood that you considered to be an HBA  
11 neighborhood in Virginia Beach?

12 A. They're -- I recall the two areas Green  
13 Run, I believe, and Newtown. And so there were two  
14 areas, I believe, that were somewhat hubs of  
16: 41: 54 15 clusters. And so I recall that because I -- I -- I  
16 don't know if you'll ask this question, but that's  
17 how I began developing the plan itself.

18 Q. And -- and those two clusters -- can --  
19 do you recall the breakdown of Hispanic versus black  
16: 42: 09 20 versus Asian in those --

21 A. No.

22 Q. -- two clusters?

23 A. No. No, I don't recall that.

24 Q. Were both majority black? Do you know?

16: 42: 14 25 A. I -- I really -- no. I know that they

1 were HBA, you know --

2 Q. Okay.

3 A. -- Hispanic, black and Asian.

4 Q. And -- and even then do you know if they  
16: 42: 19 5 were even majority HBA or a plurality HBA?

6 A. I believe they were majority HBA, but  
7 I'm not sure because I didn't break the data down to  
8 look at the subdivisions.

9 Q. Okay. And then you used Maptitude for  
16: 42: 44 10 redistricting --

11 A. (Moved head up and down.)

12 Q. -- to review locations of majority HBA  
13 communities in the form of census tracts throughout  
14 the city. What is that process?

16: 42: 52 15 A. Essentially, you can get a good idea  
16 with the maps that -- that I created that showed  
17 1990 and -- and 2000 -- I mean 2010 rather.

18 Q. Is this in one of the appendices --

19 A. Yes.

16: 43: 09 20 Q. -- or is it at the end of the --

21 A. On page 14.

22 Q. Oh.

23 A. And so --

24 Q. The report itself.

16: 43: 16 25 A. -- this map gave me the ability to

1 understand the location of where these HBA  
2 communities existed. And so this was a starting  
3 point of where districts would be created.

4 And what I found out was that there are  
16: 43: 31 5 really four -- you could say three, but four  
6 different cluster areas that I had to combine at  
7 least two of them together in order to form a  
8 district. And -- and that was the process of -- of  
9 creating and developing the plans.

16: 43: 45 10 Q. Okay. And the cluster areas are shown  
11 on the map on the right on page 14?

12 A. Correct.

13 Q. Okay.

14 A. Correct.

16: 43: 51 15 Q. And -- and then so how would you  
16 describe those cluster areas geographically to us?

17 A. I -- I -- I call it -- and I -- I don't  
18 know if I included this in the -- the report. I  
19 think I didn't. I called this the -- so the upper  
16: 44: 08 20 right quadrant of the city. And so it's the middle  
21 to northwest -- upper left, rather. I think I said  
22 right, but it's the mid to northwest to mid to  
23 western portion of the city.

24 Q. Those are the two different ones?

16: 44: 27 25 A. Yes.

1 Q. Okay.

2 A. And -- and -- and -- well, no. Those  
3 are the areas. They represent the areas of -- the  
4 generic areas where the bulk of the Hispanic, black  
16: 44: 40 5 and Asian populations combined exist.

6 The -- the -- the three areas -- I mean  
7 the three or four areas would be the mid -- sort of  
8 the mid of Virginia Beach -- there is one in the  
9 northwest of Virginia Beach, there's one in the  
16: 44: 56 10 west, and then one leaning toward northwest. And so  
11 there -- like I said, there's either three or four.  
12 I like to say four because there's four areas of  
13 majority Hispanic, black and Asian combined sort of  
14 clusters. One of them is a single cluster, if there  
16: 45: 14 15 is such a thing.

16 Q. And -- and in terms of the -- the  
17 overall total population of the city, is there -- is  
18 that clustered in any part of the city?

19 MS. HARLESS: Objection to form.

16: 45: 30 20 BY MR. BOYNTON:

21 Q. Tot -- total population. In -- in terms  
22 of all races, where is population concentrated in  
23 the city of Virginia Beach?

24 A. Oh. I didn't look at that. Yeah.

16: 45: 39 25 Q. You did not look at that.

1 A. No.

2 Q. Okay.

3 A. No.

4 Q. And looking at this map, the darker  
16: 45: 43 5 green on the right -- on the map on the right  
6 represents 50.00 percent to 100.00 percent HBA  
7 combined census tracts, correct?

8 A. Correct.

9 Q. And what was the highest percentage you  
16: 45: 57 10 found of any of these census tracts?

11 A. I can't recall.

12 Q. And do you recall the breakdown for the  
13 ones that are 50 or over between black versus  
14 Hispanic versus Asian populations?

16: 46: 11 15 A. I -- I -- I was concerned about the  
16 community as whole, not individual races.

17 Q. Is -- is that phase that we're at where  
18 you said, "Next, I used Maptitude for  
19 Redistricting..." -- is that where you did the  
16: 46: 32 20 disaggregation or is that later?

21 A. That's later. And -- and I don't know  
22 if I included that as -- I don't know if I included  
23 that as a step in the methodology or that was just  
24 an assumption that when I used CVAP that was  
16: 47: 05 25 understood that I did it.

1 Q. Okay. Next paragraphs, the bottom  
2 paragraph on page 5 --

3 A. Uh-huh.

4 Q. -- "Maptitude for Redistricting was also  
16: 47: 14 5 utilized the draw of the Illustrative Plan."

6 What is involved in that step? Walk me  
7 through it.

8 A. Right. And so, as I said before, that  
9 the initial step was to determine where the location  
16: 47: 26 10 of HBA communities exist. And so the second thing  
11 is I understood -- or I realized, rather, that you  
12 needed to connect two of -- excuse me -- these four  
13 cluster areas, if you want -- if you wish, in order  
14 to draw a particular district.

16: 47: 46 15 And so the process basically was  
16 involved in how do you actually connect two of these  
17 HBA communities in a compact fashion with splitting,  
18 you know, minimal VTDs and preserving the  
19 neighborhoods that exist.

16: 48: 03 20 Q. And you said you used voting tabulation  
21 districts as the dominant building block for the  
22 plan, correct?

23 A. Right. Right.

24 Q. What is a voting tabulation district?

16: 48: 15 25 A. Voting tabulation districts, or VTDs,

1 are created by the census. And they're created by  
2 the census to approximate precincts. In some areas  
3 they are identical to precincts, in other areas  
4 they're slightly off and then other further areas  
16: 48: 34 5 they're really off.

6 Q. Did you determine which of those  
7 categories Virginia Beach falls into?

8 A. Slightly off.

9 Q. Okay. So the fact that there is a  
16: 48: 43 10 voting tabulation district under 2010 census data  
11 does not mean that it is a precinct in -- in modern  
12 Virginia Beach?

13 A. Correct. I'd say the majority of them  
14 are -- are matching the precincts, but there are  
16: 48: 59 15 some that don't. And that's why I leaned toward  
16 using the VTDs because the VTDs carry with it the  
17 census data. The precincts don't.

18 Q. You said you downloaded the precinct  
19 data, though, correct?

16: 49: 12 20 A. Correct.

21 Q. So you did have access to that?

22 A. Yes.

23 Q. But you chose not to use the census --  
24 the -- I'm sorry -- the precinct data?

16: 49: 21 25 A. Correct, because they slice through not

1 only VTDs, but they also cut through census blocks.  
2 And so the question is what population exists in the  
3 precincts.

4 Q. Are --

16: 49: 32 5 A. And unless --

6 Q. Go ahead.

7 A. Okay. Unless Virginia Beach had some --  
8 had done some analysis to determine that this split  
9 -- census block was split this way, you couldn't  
16: 49: 41 10 determine the population inside the precincts.

11 Q. Are -- are you aware of any Virginia  
12 requirements for when redistricting occurs that  
13 precincts not be split?

14 A. I -- I think there is something that  
16: 49: 59 15 mentions not splitting precincts, but my  
16 understanding was that was not for redistricting  
17 purposes. It was for a different purpose.

18 Q. What purpose do you understand it to be?

19 A. I -- I think what they're trying to do  
16: 50: 19 20 is cut back on administrative costs in not having  
21 multiple ballots in the same precinct. And so that  
22 was the purpose of that. It's not that you couldn't  
23 split it. It's that they were trying to not have  
24 multiple ballots in -- in the same precincts.

16: 50: 35 25 Q. And I'm -- I'm just asking as to your

1 understanding. Is it your understanding that if --  
2 if a -- a map is adopted in Virginia Beach that it  
3 can be based on voting tab -- voter tabulation  
4 districts instead of precincts even where they don't  
16: 50: 49 5 match?

6 A. They would have to realign the precincts  
7 or realign the areas definitely in -- in the city.

8 Q. They'd have to realign the --

9 A. Precincts.

16: 51: 00 10 Q. Or they'd have to change the VTDs to  
11 precincts, or both?

12 A. They'd have to realign the precincts --  
13 I mean, the -- changing the VTDs would require input  
14 from the census, and that wouldn't occur.

16: 51: 11 15 Q. As it stands today, the VTDs that you  
16 used do not exactly align with Virginia Beach  
17 precincts?

18 A. Correct.

19 Q. Okay.

16: 51: 21 20 A. But that is the -- that would -- they  
21 would -- they reflect the initial -- or the official  
22 census blocks data associated with it. So you're  
23 forced or compelled to using it unless you can  
24 translate population from the census blocks to the  
16: 51: 46 25 precincts.

1 Q. Does -- does that get into  
2 disaggregation or are we still at a higher level at  
3 that point?

4 A. That would be up to the City in how they  
16: 51: 59 5 actually apportion that. It could be a variety of  
6 different ways how they apportion it.

7 Q. For you to convert voting dis -- voting  
8 tabulation districts to precincts would involve what  
9 activities?

16: 52: 12 10 A. To convert voting tabulation to  
11 precincts?

12 Q. To precincts. To existing precincts.

13 A. I would probably do it the opposite way.  
14 I'd convert the precincts to the voting tabulation  
16: 52: 26 15 districts. That would involve changing the  
16 precincts. And the reason for that is precincts are  
17 created by census blocks, and you want to use census  
18 blocks as that building block. If -- if you did --  
19 and maybe this is your question -- I would have to  
16: 52: 41 20 apportion the census block, meaning that determine  
21 when you split a census block what population goes  
22 into one side of the precinct and what population  
23 goes to the other side. So there has to be  
24 something that gives that sort of indication.

16: 52: 57 25 Q. But just to be clear, in all the maps

1 you prepared in this case from Appendix A in the  
2 amended complaint to the map you provided in the  
3 initial report to the, I think, five maps you  
4 provided in the rebuttal report, none of those are  
16: 53: 13 5 based on precincts, correct?

6 A. Correct. Correct. All based on -- on  
7 voting tabulation districts.

8 Q. Okay. And you -- I believe you say here  
9 -- well, you do say here, "...and used single race  
16: 53: 26 10 alone CVAP instead of VAP in determining whether  
11 majority HBA districts could be developed."

12 Does that correctly restate the process  
13 you used --

14 A. Yes.

16: 53: 37 15 Q. -- for -- for the initial report?

16 A. Right. I used the single race alone,  
17 but then, of course, separately, as I say, provided  
18 the black and white mixed race.

19 Q. Only in your rebuttal report, though?

16: 53: 50 20 A. No. No. No. In -- inside there --  
21 it's an indication of what black and white  
22 percentages are for the initial report as well.

23 Q. Okay. Over here. All right.

24 A. Yeah. So -- and it's included in the  
16: 54: 03 25 appendix as well, the tables, but I wanted to

1 provide a -- the most conservative estimate without  
2 the black and white mixed race.

3 Q. And so the most conservative estimate is  
4 using CVAP instead of VAP, correct?

16: 54: 19 5 A. Right.

6 Q. And it's using the three single race  
7 groups alone and not the blacks and whites mixed  
8 race?

9 A. Correct. Correct.

16: 54: 27 10 Q. You call out in footnote 8, "In most  
11 instances, Hispanic and Asian CVAP percentages yield  
12 lower percentages than their associated VAP  
13 percentages."

14 Why do you believe that is?

16: 54: 52 15 A. Because of the non-citizens,  
16 essentially. So when you remove non-citizens that  
17 percentage goes down.

18 Q. Is that a trend that you do not find  
19 with black per -- CVAP percentages or white CVAP  
16: 55: 09 20 percentages?

21 A. Black sometimes possibly, but not as  
22 much as Hispanic and -- and Asian. Some -- many  
23 times when you look at a plan -- a plan and you look  
24 at the CVAP the black percentage will actually  
16: 55: 26 25 increase versus the voting age percentage.

1 Q. And why do you -- what do you attribute  
2 that to?

3 A. Because the non-citizen rate for  
4 Hispanic and let's say Asian is higher than the  
16: 55: 35 5 non-citizen rate for whites and blacks.

6 Q. As -- as part of preparing your report,  
7 your initial report, the July 15th, twenty-eight --  
8 2019 report, you also reviewed certain code  
9 provisions -- Virginia Code provisions, correct?

16: 55: 52 10 A. Uh-huh.

11 Q. How did you select those code provisions  
12 to review?

13 A. How did I select?

14 Q. Why did you choose to review those code  
16: 55: 59 15 provisions versus others?

16 A. Oh. This seemed like the only relevant  
17 portion for drawing a district plan.

18 Q. Okay. And that's Title 24, Chapter 3  
19 of --

16: 56: 09 20 A. Yes.

21 Q. -- the Code of Virginia?

22 A. Yes.

23 Q. And so that particular provision, 2 --  
24 24.2-30 -- 304.1 says, "If the members are elected  
16: 56: 23 25 from districts or wards and other than entirely at

1 large from the locality, the districts or wards  
2 shall be composed of contiguous and compact  
3 territory and shall be so constituted as to give, as  
4 nearly as is practicable, representation in  
16: 56: 39 5 proportion to the population of the district or  
6 ward," correct?

7 A. Correct.

8 Q. And so in -- in endeavoring to draw the  
9 illustrative map that was provided in the initial  
16: 56: 49 10 report you were looking to comprise the districts or  
11 wards of contiguous and compact territory, correct?

12 A. Correct.

13 Q. And you were looking to constitute them  
14 and -- as nearly as practicable, representation in  
16: 57: 06 15 proportion to the population of the district or  
ward?

17 A. Correct.

18 Q. So those were goals of your initial  
19 report map?

16: 57: 11 20 A. Correct.

21 Q. Okay. And then I believe you call out  
22 the five most commonly used traditional  
23 redistricting criteria during the map drawing  
24 process, correct?

16: 57: 21 25 A. Correct. Those are the --

1 Q. You -- you utilized all five?

2 A. Yes, correct.

3 Q. Well, how do you balance equal  
4 population where maybe that conflicts with con --  
16: 57: 32 5 contiguity or compactness?

6 A. Right. Equal population is probably  
7 easy because it's -- it's just best to just say  
8 within the ten percent overall or the plus or minus  
9 five percent as a guide that map drawers do. They  
16: 57: 46 10 usually draw maps of plus or minus five. And that  
11 stage keeps you out of trouble. And so that's --  
12 that's easy, and so you prioritize -- prioritize  
13 that.

14 Contiguity -- that's easy as well.

16: 57: 59 15 Unless you're in a -- a -- a city that annexes areas  
16 that aren't adjacent, you can make the districts con  
17 -- contiguous.

18 Then comes the other ones.

19 Q. In compactness -- let's start there.

16: 58: 16 20 A. Right.

21 Q. You, I believe, used three different  
22 compactness measures --

23 A. Uh-huh.

24 Q. -- or ratings, correct?

16: 58: 22 25 A. Correct.

1 Q. How -- how -- is it Reock --

2 A. Reock.

3 Q. -- Polsby-Popper --

4 A. Correct.

16: 58: 26 5 Q. -- and Minimum Convex Hull?

6 A. Correct.

7 Q. Is there one you prefer over the other  
8 two?

9 A. No. And -- no. I always tell people  
16: 58: 36 10 that you should -- you should use three.

11 Q. What is your level of tolerance in each  
12 of these measures on a margin perspective?

13 MS. HARLESS: Objection to form.

14 BY MR. BOYNTON:

16: 58: 48 15 Q. And I -- I can probably reword that.

16 You know, what -- what -- starting first  
17 with Reock.

18 A. Uh-huh.

16: 58: 54 19 Q. You know, what -- what -- when you're  
20 drawing maps generally, whether it be for, you know,  
21 the -- the Campaign Legal Center or anyone else --

22 A. Uh-huh.

23 Q. -- what is your standard of deviation  
24 for your -- for the Reock factor?

16: 59: 05 25 A. There's not a particular value --

1 universal value. You have to look at the  
2 configuration of the city or state, or whatever, or  
3 county and then look at other plans, the resident --  
4 residency plan, and then you draw some sort of  
16: 59: 27 5 opinion of a low mark that you would actually go.

6 Q. Do you have a number in mind when you  
7 are drawing plans as a demographer?

8 A. No, not -- not until I, you know,  
9 develop the plans and then begin to look at other  
16: 59: 42 10 comparative -- comparisons.

11 Q. And is that the same for Polsby-Popper  
12 and Minimum Convex Hull?

13 A. Yes.

14 Q. And, as I understand it, the most  
16: 59: 51 15 compact is zero and the least compact is one under  
16 all three scales?

17 A. Reverse.

18 Q. I'm sorry. The -- the --

19 A. The most compact is one.

16: 59: 58 20 Q. And the least compact is zero?

21 A. Right.

22 Q. Okay. When you at footnote 11 on page 6  
23 say, "The Gingles case requires plaintiffs to show  
24 that the minority group 'is sufficiently numerous  
17: 00: 28 25 and geographically compact to form a majority in a

1 single-member district, " what standard of  
2 compactness do you apply?

3 A. The three measures.

4 Q. Okay. But you don't have a -- other  
17:00:38 5 than using those three --

6 A. Right.

7 Q. -- methods for determining compactness,  
8 do you have any specific tolerance for compactness  
9 in following the Gingles prong 1?

17:00:48 10 A. No, but again it varies depending upon  
11 the jurisdiction and the -- the -- the lay of the  
12 land, if you will. And so that's the reason why --  
13 it -- this is just my opinion. The courts did not  
14 pick out a specific compactness measure or any  
17:01:08 15 values. They --

16 Q. Did you --

17 A. -- didn't say.

18 Q. I'm sorry.

19 A. Oh. They -- they didn't pick out any  
17:01:12 20 specific measures or values to -- to target because  
21 there is a -- a level of subjective expert opinion  
22 in determining this.

23 Q. So did -- is it fair to say that you  
24 used your normal compactness tolerance in preparing  
17:01:30 25 this particular Gingles illustrative plan?

1 MS. HARLESS: Objection to form.

2 BY MR. BOYNTON:

3 Q. You can answer.

4 A. When you say usual, yes, usual. Not  
17:01:41 5 necessarily usual values.

6 Q. Well, explain to me what that means.

7 A. Meaning that, as I mentioned before,  
8 every jurisdiction is different. And so .5 in a  
9 particular jurisdiction for Reock may be okay where  
17:01:58 10 in another -- well, let me use -- .3 may be a -- a  
11 low point in a particular jurisdiction. In another  
12 jurisdiction it may be .2 or .1. It all depends on  
13 the particular district, the dynamics going on in  
14 there.

17:02:13 15 Q. With respect to the Virginia Beach plans  
16 you have prepared in this case, did you have a more  
17 stringent or a more relaxed compactness tolerance  
18 because you were doing a Gingles plan as opposed to  
19 another plan?

17:02:25 20 A. Right. I -- I'm -- in -- in this  
21 particular case I'm looking at breaking the  
22 threshold, which is different than if I'm analyzing  
23 multiple plans and saying this is the better plan.  
24 So --

17:02:40 25 Q. What threshold are you looking to break?

1           A.     So I'm looking at a threshold of a  
2 particular set of values for Reock, Polsby-Popper  
3 and Minimum Convex. And so I -- I look at those and  
4 make a determination in the end, of course, of  
17:02:56 5 whether this is compact enough.

6           Q.     But what threshold are you looking to  
7 break? That's what I'm trying to understand. You  
8 said --

9           A.     Yeah, but I know you -- I -- are you --  
17:03:05 10 are you looking for a particular value?

11          Q.     No. I'm saying are -- you -- there are  
12 two pieces to what you've cited the Gingles case as  
13 requiring.

14          A.     Right.

17:03:17 15       Q.     One, that the minority group is  
16 sufficiently numerous, and, two, that the minority  
17 group is geographically compact.

18          A.     Right.

19          Q.     And so sufficiently numerous I  
17:03:26 20 understand to be you shooting for 50 percent under  
21 some analysis, correct?

22          A.     Right. Right.

23          Q.     Okay. Well, geographically compact as  
24 compared to sufficiently numerous -- what is -- how  
17:03:36 25 do you interpret that in your work in this case?

1           A.     Right.  And -- and it's easy to do the  
2 sufficiently num -- numerous because, as you know,  
3 50 percent -- over 50 percent becomes a majority.  
4 That doesn't translate into compactness.  It -- it  
17:03:54 5 -- it may be .1, it may be .2, depending upon the  
6 situation.  And so that's why you can't use a  
7 universal number or val -- set of values from  
8 jurisdiction to jurisdiction.

9                         So what I do is after the plan or during  
17:04:11 10 the process of creating a plan you look at those  
11 values, you consider other plans, the residency  
12 plan, and you make a judgment call of whether it's  
13 compact or not.

14                         So it's not that I need to get it above  
17:04:26 15 this particular amount for -- for all of the  
16 different jurisdictions out there.  It's dependent  
17 upon the situation.

18           Q.     Okay.  But you feel compelled to make a  
19 judgment call in preparing this plan --

17:04:38 20           A.     Right.

21           Q.     -- under Gingles with respect to it  
22 being sufficiently compact?

23           A.     Right.

24           Q.     And you made that judgment call as to  
17:04:45 25 the map that is proposed in the original report?

1 A. Correct.

2 Q. And your process for determining whether  
3 that particular plan was sufficiently compact --  
4 compact was what?

17:05:00 5 A. Was looking at the three measures and  
6 making a determination of whether the district or  
7 districts were compact.

8 Q. Well, how do you decide whether Virginia  
9 Beach is X versus Tampa, Florida is Y versus  
17:05:12 10 Birmingham, Alabama is Z?

11 A. One of the things that you do is -- you  
12 know, first I said you'd look at the comparison of  
13 other plans, and the -- I only had one plan  
14 basically. Second is the configuration of the city,

17:05:27 15 whether there is any reasons why a particular  
16 district would be lower. And I found one, which is  
17 the notch in Virginia Beach, causes districts in  
18 that particular area to be -- to be lower. And so  
19 you -- you -- and then you just use your experience

17:05:45 20 off of districts that you've seen overall and  
21 integrate all of it and come up with a -- basically  
22 an opinion of -- of whether it's compact or not.

23 Q. Just to -- on page 14 -- I believe you  
24 already referred to that, those two exhibits on page  
17:06:10 25 14 --

1 A. Uh-huh.

2 Q. -- can you tell me where the notch is?

3 A. If you see on the -- I believe it's  
4 Norfolk right there. It's on the northwest edge of  
17:06:24 5 Virginia Beach. You can see it's a little nook  
6 that's in there. And that causes for the most part  
7 the Polsby-Popper and -- oh, I have to recall -- I  
8 believe Polsby-Popper and the Convex Hull to be  
9 lower than what it would normally be if you had a  
17:06:52 10 district adjacent to that -- that notch.

11 Q. But it does not materially affect the  
12 first test, the Reock?

13 A. Reock.

14 Q. Reock.

17:06:59 15 A. It -- it -- it does a -- a little bit,  
16 but not as much as the other ones because of the way  
17 that the algorithms are.

18 Q. Are there any other Virginia Beach  
19 geographic factors that impact your ability to draw  
17:07:09 20 a compact district?

21 A. Well, besides the shape of the VTDs,  
22 meaning that if you're trying to keep VTDs intact,  
23 then some of the VTDs are not conducive for compact  
24 districts.

17:07:30 25 Q. This is the only thing that's coming to

1 mind today on --

2 A. Correct.

3 Q. -- geographic limitations to

4 compactness --

5 A. Correct.

6 Q. -- of districts in Virginia Beach?

7 A. Correct.

8 Q. Okay. Now, you get to the item 4 of the

9 5 that you identify as most commonly used

17:07:49 10 traditional restriction -- redistricting criteria  
11 which is minimizing political subdivision splits.

12 What -- what political subdivisions did you identify  
13 as potentially being split in Virginia Beach?

14 A. These are the VTDs that reflect  
17:08:05 15 precincts.

16 Q. That's where you get into the -- you  
17 know, the district is harder to draw if you don't  
18 know where the line is between precincts or  
19 districts in this case?

17:08:17 20 MS. HARLESS: Objection --

21 A. The --

22 MS. HARLESS: -- to the form.

23 BY MR. BOYNTON:

24 Q. I can rephrase.

17:08:18 25 A. Uh-huh.

1 Q. Does minimizing political subdivision  
2 splits impact this analysis other than where the  
3 VTDs are located? Is there any other factor that  
4 impacts minimizing subdivision splits besides the --  
17:08:42 5 the orientation or alignment of VTDs under the prior  
6 census map?

7 A. Is there any other -- I'm trying to  
8 understand your question.

9 Q. Uh-huh.

10 A. And --

11 Q. You've said that a goal of redistricting  
12 or -- or drawing districts is minimizing political  
13 subdivision splits, correct?

14 A. Correct.

17:09:02 15 Q. I personally as a non-demographer don't  
16 see a VTD as a political subdivision, but I  
17 understand that you do. Is that correct?

18 A. Oh, yeah. Yeah. V -- VTDs, I think,  
19 are universally accepted as a political subdivision  
20 split --

21 Q. But --

22 A. -- when you look at them because they  
23 mimic precincts.

24 Q. I think this is a language issue.

25 A. Okay.

1 Q. When I hear political subdivision I  
2 think City of Virginia Beach versus City of Norfolk  
3 versus --

4 A. Right.

17:09:31 5 Q. -- City of Hampton.

6 A. Right. Right.

7 Q. Are -- are any of those political  
8 subdivisions impacted in -- in the way I am using  
9 the word "impacted" in your analysis?

17:09:38 10 A. I -- I got you. No. No. No. None of  
11 those city -- is a city -- is an independent city,  
12 so clearly you -- it doesn't have any  
13 subdivisions --

14 Q. And -- and --

17:09:46 15 A. -- inside the city.

16 Q. And there's nothing with respect to how  
17 state house or senate districts or congressional  
18 districts are drawn that impacts your ability to  
19 draw City Council districts under your analysis,  
20 correct?

21 A. Correct.

22 Q. Okay.

23 A. Correct. Correct.

24 Q. Preservation of communities of interest.

17:10:04 25 What does that mean in the context of the

1 preparation of your illustrative plan for -- within  
2 the original expert report?

3 A. Right. And, as I mentioned before -- I  
4 think you were correct -- that neighborhoods that  
17:10:21 5 were reflected with the subdivisions are commonly  
6 used as a community of interest in your attempt to  
7 not split neighborhoods, but there also could be  
8 other interests of different population groups, such  
9 as income, such as education, poverty. And so those

17:10:43 10 are also common interests that a partic --  
11 particular group has an interest in, let's say, a --  
12 decreasing poverty in a particular area. And so if  
13 you can keep a cohesive group of common communities  
14 that have -- let's say below poverty level, there is  
17:11:03 15 a desire to keep them in tact so they can advocate  
16 for certain issues that --

17 Q. Okay.

18 A. -- you know, relate to increasing --

19 Q. Now --

17:11:09 20 A. -- or decreasing poverty.

21 Q. -- you've said you downloaded from city  
22 sources neighborhood or subdivision data, correct?

23 A. Yes.

24 Q. How did you incorporate that into your  
17:11:18 25 maps?

1           A.     I overlaid them so I could actually view  
2 while I was drawing or developing the plan to see if  
3 I was splitting any -- any neighborhoods. So I  
4 could actually visually see.

17:11:31 5           Q.     What -- what did you determine in terms  
6 of how many neighborhoods you were splitting or not  
7 splitting under the illustrative plan in your  
8 initial expert report?

17:11:43 9           A.     Right. I didn't do any analysis off of  
10 not splitting, but I determined that visually I kept  
11 the bulk of the neighborhoods intact.

12           Q.     So you don't have a count, sitting here  
13 today, of neighborhoods that got split?

14           A.     No. No.

17:11:54 15           Q.     Okay. And then you say, "Finally, after  
16 drawing a full Illustrative Plan, I generated a  
17 final report from Maptitude summarizing the Plan's  
18 performance on a set of traditional redistricting  
19 criteria and relevant conclusions."

17:12:10 20           A.     Right.

21           Q.     What's involved in generating that final  
22 report?

23           A.     And so, you know, Maptitude has a series  
24 of reports that pertain to these traditional  
17:12:22 25 redistricting criteria. So I pro -- produced the

1 reports on political subdivision splits, produced a  
2 report on contiguity, produced a report on  
3 compactness and then equal population, just so you  
4 have a record of what -- what each of these  
17:12:41 5 districts actually have as far as those traditional  
6 redistricting criteria.

7 Q. And -- and where can I find those in  
8 your report?

9 A. They're in the appendix.

17:12:50 10 Q. Well, are there sep -- are there  
11 separate reports for contiguity --

12 A. Yes.

13 Q. -- vis-á-vis political subdivision  
14 splits versus compactness?

17:13:17 15 A. Yes. The Appendix G, Political  
16 Subdivision Splits.

17 Q. Okay. So those -- those are the reports  
18 you're talking about?

19 A. Correct.

17:13:27 20 Q. They're -- and they're all attached?

21 A. Correct.

22 Q. Okay.

23 A. Yes. G, H, and maybe another one, but  
24 they're in the appendix section.

17:13:39 25 Q. Going to table in paragraph 8 -- on page

1       8 , Table 1, Total Population -- that's the -- the  
2       broadest net, correct?

3           A.     Correct.

4           Q.     If that's the -- I guess the -- if -- if  
17:13:57  5       CVAP is the most conservative, how would you  
6       characterize total population for purposes of  
7       drawing maps and as a demographer?

8           A.     Oh, I -- I -- I think I get where you're  
9       -- you're coming to, which is most likely, but  
17:14:22  10      that's not in all cases, that the percentage of  
11     Hispanic, black and Asian or the minority percentage  
12     would be higher with total population usually.

13           Q.     Does it -- can I -- can we say the alt  
14       -- the alternative most aggressive?

17:14:37  15      MS. HARLESS: Objection to form.

16           A.     I don't know if it's the most  
17       aggressive, but it's -- it's the highest percentage.

18     BY MR. BOYNTON:

19           Q.     Okay.

17:14:43  20      A.     Usually, but it's not -- not necessarily  
21       that because --

22           Q.     Do you -- I'm sorry.

23           A.     All right. Well, because of the fact  
24       when you -- when you end up going to CVAP many times  
17:14:54  25       things become reversed and you actually end up with

1 a higher percentage sometimes.

2 Q. Is it the least conservative? Can we  
3 agree on that?

4 A. It -- it -- sometimes. Okay? How about  
17:15:10 5 that?

6 Q. You -- you make a reference in that  
7 chart to using five-year ACS data 13 through 17  
8 MP2015, and then you drop a footnote as to what that  
9 is.

17:15:27 10 I am to understand that to mean you are  
11 using only the 2015 dataset from the ACS because  
12 it's the temporal midpoint of the five-year survey?

13 A. Yes. I -- just to re -- just to  
14 rephrase it slightly, the five-year ACS 2013 to 2017  
17:15:50 15 has a midpoint of 2015. And it's there just to give  
16 you a -- a -- an understandable reference point  
17 because people usually don't understand a five-year  
18 span of time, but they do understand a particular  
19 point in time. And it's -- it's there as a purpose  
17:16:09 20 to show -- visually understand the growth and the  
21 trend of the populations.

22 Q. Stated another way, whenever you say  
23 MP2015 in this report you're using data only from  
24 2015, correct?

17:16:24 25 A. No.

1 Q. You are averaging? And that's --

2 A. No.

3 Q. -- what I'm trying to get to.

4 A. That's what I'm saying. It's the  
17:16:32 5 five-year data point. So what you see here where it  
6 says five-year ACS thir -- 2013 to 2017 -- the  
7 midpoint for that dataset is 2015. That gives you  
8 an idea, a reference in time, of approximately where  
9 you can actually view that dataset.

17:16:51 10 The dataset is collected over five  
11 years, but sometimes -- or not sometimes. Most of  
12 the time it's not understandable how you can  
13 reference when that timeframe is, 2013 to 2017. So  
14 this just provides you somewhat of a context of

17:17:10 15 looking at 1990, looking at 2000, looking at 2010,  
16 okay, this five-year, it -- it -- it's not 2015, but  
17 it's approximately the timeframe somewhere -- a -- a  
18 snapshot in time 2013 to 2017. The perfect

19 situation would be that 2015 would be the values for  
17:17:33 20 that if they took a perfect census. If they  
21 averaged both sides and every year was exactly the  
22 same, 2015 would be the amount for that --

23 Q. I --

24 A. -- as an average.

17:17:42 25 Q. I -- I think I'm asking a simpler

1 question.

2 A. Okay.

3 Q. If you look at total population --

4 A. Uh-huh.

17:17:50 5 Q. -- the first column -- or first -- first  
6 row, you have 450055 under your five-year ACS 13 to  
7 17 MP --

8 A. Right.

9 Q. -- 2015.

17:18:03 10 A. Correct.

11 Q. Is that 450055 a five-year average or is  
12 it the single data point from 2015 in the ACS?

13 A. It is the five-year what they call  
14 average for the ACS.

15 Q. Okay.

16 A. That's the value of the -- the -- the  
17 dataset. The 2015 is just there for a referencing  
18 point of the midpoint to there to let you know that  
19 you're talking about a sequence 1990, 2000, 2010.

17:18:31 20 And you put that 2015 to just show that you're  
21 talking about approximately that time -- excuse me  
22 -- period between 2013-2017 and then you have 2017.

23 Q. So whenever you call out in your report  
24 MP2015 data you are using the five-year average ACS  
17:18:51 25 2013 to 2017 and saying, "I mean this to approximate

1 the 2015 number"?

2 A. No.

3 Q. Okay. Well, tell me --

4 A. I'm -- I'm -- I'm using it just for  
17:19:01 5 visualization so individuals can look at this to  
6 understand a reference point of where that is.

7 It's hard to understand 2013 to 2017.

8 What -- what year are we talking? It's a five-year  
9 period of time. But you can understand that the  
17:19:18 10 midpoint for that is 2015. So --

11 Q. But -- but -- I -- well, I'm still  
12 trying to understand. I hope it's a universal  
13 answer --

14 A. Okay.

17:19:26 15 Q. -- because I don't want to have this  
16 conversation again.

17 A. Right.

18 Q. This portion of the conversation again I  
19 should say.

17:19:30 20 A. Yeah.

21 Q. Whenever you call out five-year ACS 13  
22 to 17 MP2015 you are incorporating the five-year  
23 average number?

24 A. That is the five year-average number.

25 Q. Okay.

1 A. Correct.

2 Q. Hallelujah.

3 A. Correct. Okay.

4 Q. I -- I -- it's hard to not be a  
17:19:49 5 statistician or --

6 A. Well --

7 Q. -- demographer and ask the question --

8 A. Yes.

9 Q. -- that your intending sometime, so I  
17:19:53 10 appreciate you bearing with me on that.

11 A. Uh-huh. No problem.

12 Q. So let's go over to page 10. You have a  
13 chart there and it identifies Figure 1, and you have  
14 two vertical bars in the bar graph, one for ACS  
17:20:37 15 1317, and another for 2017 with two asterisks beside  
16 it.

17 Am I understanding that the orange or  
18 the ACS 1315 is the five-year average number?

19 A. Yes.

17:20:52 20 Q. And the 2017 is the point number for  
21 2017 only?

22 A. Correct.

23 Q. Okay.

24 A. And that said, and this gets into the  
17:21:07 25 weeds too, the 2017 comes from the one-year ACS

1 estimates. That's also a rolling census as well.

2 Q. So there's some data smoothing that  
3 happens within the ACS --

4 A. It's --

17: 21: 24 5 Q. -- that gives you your one-year  
6 estimate?

7 A. It's the same as a five-year, but it's  
8 just one year.

9 Q. Okay. And generally that shows a  
17: 21: 40 10 uptrend in Hispanic, black and Asian voting  
11 population percentages moving forward in time?

12 A. Correct.

13 Q. Zipping along.

14 Turning to page 12 then, the Figure 2,  
17: 22: 22 15 you are charting the same trends but using CVAP as  
16 opposed to simply VAP?

17 A. Correct.

18 Q. And there's no other difference in what  
19 you're representing there?

17: 22: 34 20 A. Correct.

21 Q. You get into median household income  
22 toward the bottom of that page, page 12. And you  
23 report that medium household income in 2017 for the  
24 city of Virginia Beach was \$72,586, and then you get  
17: 22: 57 25 into poverty-level statistics and education

1 statistics, correct?

2 A. Correct.

3 Q. And that's for purposes of defining your  
4 communities of interest to draw the maps; is that  
5 correct?

6 A. Correct.

7 Q. Did you look at how various ethnic  
8 groups in Virginia Beach or dif -- or racial groups  
9 in Virginia Beach compare to the national averages?

17: 23: 19 10 A. No. No.

11 Q. Okay. Do you know if -- if African  
12 American or -- or black median household income in  
13 Virginia Beach is higher or lower than the national  
14 average?

17: 23: 32 15 A. No.

16 Q. Do you know if Hispanic household income  
17 in Virginia Beach is higher or lower than the  
18 national average?

19 A. No. Didn't look at that.

17: 23: 39 20 Q. Is that not important to your analysis?

21 A. Not in the context of redistricting.

22 I'm looking at what's going on inside the city.

23 Q. And -- and you're using all of the  
24 one-year 2017 data for that?

17: 23: 53 25 A. Yes.

1 Q. With the caveat that there's data  
2 smoothing -- smoothing even in the one-year?

3 A. Yes. It's a rolling census still.

4 Q. You make a statement that, "In fact..."  
17: 24: 19 5 -- we're -- this is at the bottom of page 13 where  
6 we're looking at the distribution of majority HBA  
7 communities. And in the bottom paragraph you say in  
8 the middle of that paragraph, "In fact, reviewing  
9 data that sums each race/ethnicity in the census

17: 24: 37 10 tracts that have greater than 40% percent HBA  
11 verifies that the most Hispanic, Black, and Asian  
12 persons reside in the same communities," correct?

13 A. Correct.

14 Q. And then you -- your reference or your  
17: 24: 50 15 -- your data point for that is that Table 5 says  
16 that 31 of Virginia Beach's hundred census tracts  
17 contain 54.90 of the HBA combined population,  
18 correct?

19 A. Correct.

17: 25: 03 20 Q. How does that compare in terms of level  
21 of segregation or integration of neighborhoods with  
22 other communities you've -- you've -- you've  
23 evaluated demographically? And I'm talking about  
24 major cities, top 100 metropolitan areas.

17: 25: 22 25 A. Offhand I don't know, but I would

1 imagine that they are similar. I -- but I don't  
2 know. I would imagine that they're similar. This  
3 is a pattern that I have seen throughout the  
4 country.

17: 25: 41 5 Q. But you would agree that no community  
6 has exact distribution of its minorities through  
7 various and -- and -- and majorities throughout  
8 each neighborhood within the -- the community,  
9 correct?

17: 25: 56 10 A. I don't know if I would say no community  
11 or no city.

12 Q. Have you seen one?

13 A. I -- I -- for some reason I can't  
14 recall, but I do recall cities going through a  
17: 26: 15 15 transition point where they're -- where they are  
16 apportioned somewhat equally, but I can't recall the  
17 particular city, but it -- it is rare. It -- it is  
18 rare.

19 Q. Is -- is Virginia Beach in your  
17: 26: 32 20 experience more or less integrated than, say,  
21 Baltimore?

22 MS. HARLESS: Objection to form.

23 A. I don't know. I don't know, but I was  
24 looking at it only from the context of redistricting  
17: 26: 53 25 and whether there is a community or a growing

1 community of HBA in the city of Virginia Beach.

2 BY MR. BOYNTON:

3 Q. Would you be surprised to learn that  
4 there's at least one study that ranked Virginia  
17:27:08 5 Beach as the most integrated of the largest hundred  
6 metropolitan areas in the country?

7 A. I wouldn't be surprised at all.

8 Q. Why wouldn't you be surprised?

9 A. Virginia Beach is a progressive city and  
17:27:21 10 trying to -- Virginia Beach is a progressive city.

11 Q. Would you characterize Virginia Beach  
12 neighborhoods overall as -- as integrated or  
13 segregated?

14 A. I don't know. It -- that's a different  
17:27:37 15 type of analysis than -- than what I'm looking at.

16 You know, the analysis that I'm looking at is  
17 whether these Hispanic, black and Asian combined  
18 populations are existing in certain areas that could  
19 be considered communities, and what I've shown is  
17:28:01 20 that that is the case.

21 Now, whether Virginia Beach is  
22 segregated as a matter of fact is -- is a completely  
23 separate question and I didn't do any analysis of  
24 that.

17:28:11 25 Q. And -- and I'm referring solely to the

1 -- the population densities in neighborhoods and not  
2 in any other way --

3 A. Uh-huh.

4 Q. -- just to be clear.

17: 28: 18 5 A. Uh-huh. Sure. Sure.

6 Q. Would you agree that it would be more  
7 telling to you or -- or -- or more useful in your  
8 analysis at least from a compactness perspective if  
9 you could have said that 90 percent of the HBA  
17: 28: 38 10 communities in Virginia Beach live in four of the  
11 hundred census tracts?

12 A. Would it be --

13 Q. Easier to draw a district that -- that  
14 comports both with the -- the -- the -- the  
17: 28: 50 15 sufficiently numerous prong -- or sub-prong and the  
16 geographically compact --

17 A. Uh-huh.

18 Q. -- sub-prong?

19 A. Right.

17: 28: 57 20 MS. HARLESS: Objection to form.

21 BY MR. BOYNTON:

22 Q. You can answer.

23 A. It -- it -- it really depends. I mean,  
24 clearly if there was two census tracts that held all  
17: 29: 07 25 the black and Hispanic and Asian populations and I

1 could group them together in a district, that would  
2 be pretty easy to do that.

3 Q. Well, one of the challenges to drawing  
4 these maps is the -- the distribution of the --  
17: 29: 19 5 the --

6 A. Yeah.

7 Q. -- the -- the HBA population in Virginia  
8 Beach, correct?

9 MS. HARLESS: Objection to form.

17: 29: 24 10 A. One of the challenges is that -- as I  
11 mentioned before, is that there are clusters that  
12 are not necessarily next to each other. They're in  
13 the same vicinity of the city, but they're not  
14 adjacent to each other, so you have to connect the  
17: 29: 45 15 two. So that's -- that's the challenge I would say  
16 in changing what you just said.

17: 29: 58 20 MR. BOYNTON: Fair enough. And I'm told  
18 we're almost at the end of the tape, so it's a good  
19 time to take a break. And hopefully it will be our  
21 final break and we'll roll through the rest of it  
and get out of here at a semi-decent hour.

22 THE VIDEOGRAPHER: We're off record at  
23 5:29 p.m.

24 (Recess)

17: 38: 03 25 THE VIDEOGRAPHER: We are back on record

1 at 5:43 p.m.

2 BY MR. BOYNTON:

3 Q. Mr. Fairfax, before we took a break we  
4 were talking particularly about distribution of  
17: 44: 18 5 majority HBA communities in Virginia Beach, correct,  
6 on page 13 of your report?

7 A. Yes.

8 Q. Okay. And then just inverting kind of  
9 what said, if 45.5 percent of the Hispanic  
17: 44: 34 10 population lives in 31 census tracts, that means the  
11 majority of the Hispanic population in Virginia  
12 Beach lives in the other 69, correct?

13 A. Correct.

14 Q. Okay. And you'd said there are ten  
17: 44: 54 15 census tracts with 50 percent or more HBA clusters,  
16 if that's a better word?

17 A. Could you repeat that --

18 Q. Sure.

19 A. -- to me?

17: 45: 04 20 Q. The -- I believe you said that there  
21 were 10 census tracts -- and this is your report  
22 saying it --

23 A. Right.

24 Q. -- not you personally.

17: 45: 13 25 A. Uh-huh.

1 Q. Ten census tracts with 50 percent or  
2 more HBA performance or -- or representation,  
3 correct?

4 A. Correct.

17:45:22 5 Q. And so that means that in 21 of your 31  
6 most heavily minority tracts HBAs are actually  
7 living in a majority white area, correct?

8 A. Correct, if you're subtracting the two.

9 Q. Yes.

17:45:43 10 A. Can you repeat that just in case I'm --  
11 Q. Sure. I mean, you -- you -- you've said  
12 that there were ten census tracts --

13 A. Right.

14 Q. -- and -- and, then, i.e., not 11 or  
17:45:51 15 more, that have 50 percent or more HBAs.

16 A. Correct.

17 Q. And so you have 31 census tracts that  
18 are the most heavily minority tracts that you've  
19 identified, correct?

17:46:02 20 A. Correct.

21 Q. And so, therefore, 31 minus ten equals  
22 21.

23 A. Correct.

24 Q. So I take from that inferentially that  
17:46:09 25 there are 21 of 31 most heavily minority tracts that

1 you identified where HBAs are actually living in  
2 majority white areas.

3 A. Correct. I see what you're saying.

4 Yeah, you're -- you're saying somewhere in between  
17: 46: 25 5 50 and 40 percent.

6 Q. Yes.

7 A. Correct.

8 Q. Switching then --

9 A. I'm --

17: 46: 39 10 Q. Go ahead.

11 A. Okay. I -- I -- I -- I -- I definitely  
12 think you're accurate on what you said there was 69  
13 that were in below 40 percent. And there are -- let  
14 me just reiterate what I see there -- 21 that are  
17: 47: 00 15 between 40 and 50 percent.

16 Q. Correct.

17 A. And they are majority white.

18 Q. Correct.

19 A. Okay.

17: 47: 05 20 Q. So we're saying the same thing.

21 A. Okay.

22 Q. All right. Now, looking at your pages  
23 15, 16 and 17, these are your dot density points for  
24 Hispanic, black and Asian populations in Virginia  
17: 47: 20 25 Beach, correct?

1 A. Yes. Yes.

2 Q. Now, you have overlaid -- well, let me  
3 just word it -- the -- the -- the green -- dark and  
4 light green are the same on each of the three maps,  
17: 47: 32 5 correct?

6 A. Correct.

7 Q. And they represent the combined HBA at  
8 40 to 50 percent for light green and 50 or more for  
9 dark green?

17: 47: 43 10 A. Correct. And --

11 Q. Okay.

12 A. -- on mine just the -- there is a color  
13 variation on -- on -- on the printout let me just  
14 say.

17: 47: 53 15 Q. Okay.

16 MS. HARLESS: Yeah. Let the -- let's  
17 just let the record reflect that the printing has  
18 turned the two shades into three shades.

19 THE DEPONENT: Right.

17: 48: 01 20 MR. BOYNTON: Okay.

21 THE DEPONENT: There's -- there is a --

22 MR. BOYNTON: Well, that's unfortunate.

23 THE DEPONENT: There's a yellowish --

24 MR. BOYNTON: Okay.

17: 48: 06 25 THE DEPONENT: -- green. So -- but I --

1 I'm looking at it as --

2 BY MR. BOYNTON:

3 Q. You intended to represent two different  
4 shades of green and that's how it came across to us  
17: 48: 15 5 originally, and you were not trying to put out three  
6 different groups, correct --

7 A. Correct. And I --

8 Q. -- of the shading?

9 A. And I thought on -- on mine it came out  
17: 48: 23 10 correctly, but I --

11 Q. Well, no. Oh, it did.

12 A. Okay.

13 Q. We -- it's purely copying from us.

14 A. Okay. Okay.

17: 48: 27 15 Q. So that's why I'm trying to clarify  
16 this.

17 A. Okay.

18 Q. And I can show you my version of it if  
19 it helps you to feel --

17: 48: 34 20 A. Got you.

21 Q. -- confident in -- in what was done,  
22 but the version that I'm asking from -- but for  
23 whatever reason the copy version that is the  
24 exhibit, the colors are off somewhat in the exhibit.

17: 48: 50 25 A. Right. Okay.

1 Q. But what I am working from shows me two  
2 sets of green.

3 A. Correct.

4 Q. There's a dark green and then there's a  
17: 48: 58 5 lighter-shaded green.

6 A. (Moved head up and down.)

7 Q. And -- and I see a couple of those came  
8 on the yellow for you.

9 A. Right. Right.

17: 49: 02 10 Q. And so I will represent to you that all  
11 of the yellow ones appear on my exhibit to be light  
12 green.

13 A. Yes.

14 Q. And so that's where we get again --

17: 49: 12 15 A. Yes.

16 Q. -- ten districts that are 50 or more --

17 A. Correct.

18 Q. -- 50 percent or more and then 21

19 districts that are between 40 and 50 percent?

17: 49: 21 20 A. Correct.

21 Q. And -- and you are intending to  
22 represent on each of Figures 4, 5 and 6 the same  
23 representation with respect to the shadings?

24 A. Okay. That is correct.

17: 49: 31 25 Q. And then you are overlaying onto those

1 shaded maps red dots that represent different  
2 things?

3 A. That's correct.

4 Q. In Figure 4 it represents Hispanic dot  
17:49:45 5 density?

6 A. Yes.

7 Q. Figure 5 black dot density?

8 A. Yes.

9 Q. Figure 6 Asian dot density?

10 A. Yes. Correct.

11 Q. Looking at those three exhibits together  
12 -- and all I'm asking you to look at is the dots,  
13 not the shadings anyway -- what do you glean about  
14 the comparative density points of the three  
17:50:03 15 different communities in Virginia Beach?

16 A. Right. At -- when I look at these dots  
17 what I surmise is that they are mostly congregating  
18 around the -- the majority Hispanic/black census  
19 tracts as well as the ones above 40 to 50 percent  
17:50:23 20 let's say for each of the racial groups.

21 Q. Well, you would agree with me that there  
22 are an awful lot more dots in Figure 5 outside of  
23 those shaded areas than Figure 4, for example?

24 A. I don't necessarily agree that there are  
17:50:44 25 a lot more outside than inside. I don't know if I

1 necessarily agree.

2 Q. That wasn't exactly my question.

3 A. Okay.

4 Q. I'm sorry. I -- I -- I'm saying that --  
17: 50: 55 5 well, first of all, there are just more red dots on  
6 Figure 5 than Figure 4, correct?

7 A. Correct. Okay.

8 Q. Because there are in fact more black  
9 residents of Virginia Beach than -- than Hispanic  
17: 51: 06 10 residents, correct?

11 A. Exactly. Correct.

12 Q. But looking at that, there are dozens of  
13 red dots on Figure 5 representing black density  
14 points that are outside of the shaded areas?

17: 51: 21 15 MS. HARLESS: Objection to form.

16 BY MR. BOYNTON:

17 Q. I mean, you can count them if you want.

18 A. Well, it -- it's --

19 Q. More than a dozen?

17: 51: 28 20 A. It -- it --

21 MS. HARLESS: Objection to form.

22 A. It -- it's -- it's difficult -- you  
23 know, one dot density is used just as sort of a  
24 visual indication level of -- of where a population  
17: 51: 39 25 resides. And so at this level it may be difficult

1 to count specifically ones because of the  
2 overlapping of the dots.

3 This is used just to give you an -- an  
4 indication, a visual indication, that each of these  
17: 51: 58 5 races are residing and locating themselves in these  
6 HBA communities or near HBA communities. And -- and  
7 so when I look at 5 I look at it as validating that.  
8 I look at that the bulk of those dots are residing  
9 in those HBA communities or the near-HBA  
17: 52: 23 10 communities, and that's what the data reflects with  
11 the 31 out of 100.

12 BY MR. BOYNTON:

13 Q. Turning your attention to page 18 of  
14 your report, and we're starting to get into the  
17: 52: 35 15 illustrative plan now, you would agree that the  
16 illustrative plan that you prepared and provided in  
17 your initial report is two separate majority HBA  
18 CVAP districts, correct?

19 A. Correct.

17: 52: 55 20 Q. You've also stated that, "The  
21 Illustrative Plan also adheres to the Virginia Code  
22 sections relating to election districts..." --  
23 footnote 28 "...as well as traditional redistricting  
24 criteria."

17: 53: 15 25 What analysis did you perform to make

1 that statement?

2 A. From the reports that I produced, the  
3 equal population report, I looked at the deviation  
4 overall for the plan as well as the districts. So  
17: 53: 30 5 that's a check.

6 I -- I looked at the compactness reports  
7 and -- and made that call on whether they were  
8 compact or non-compact districts.

9 I looked at the political subdivision  
17: 53: 43 10 splits, which are VTDs. One compared them to the  
11 residency plan. Made a call that they were  
12 minimized subdivision splits.

13 And then the communities of interest,  
14 visually indicating that the -- the subdivisions  
17: 54: 02 15 that were not split from a visual point of view.

16 Q. Okay. And -- and so with respect to the  
17 communities of interest, did you make any analysis  
18 beyond looking at the -- the commonality of  
19 interests of socioeconomic factors as it relates to  
17: 54: 24 20 Hispanics, blacks and Asian populations in the  
21 neighborhood overlay that you talked about? Did you  
22 do anything else?

23 A. The census tract analysis, which should  
24 be also in here, where I looked at the census tracts  
17: 54: 40 25 that were majority Hispanic, black and Asian -- you

1 are talking in addition to that or you're not  
2 talking about that?

3 Q. No. You -- you testified that you look  
4 at the socioeconomic aspect of this in some  
17:54:52 5 detail --

6 A. Right.

7 Q. -- for -- with respect to HBA  
8 communities.

9 A. Right.

17:54:56 10 Q. And -- and -- and you -- you've also  
11 testified that you overlaid neighborhoods to -- to  
12 -- to look at or subdivisions to look at in your not  
13 splitting neighborhood communities.

14 A. Correct.

17:55:04 15 Q. I said -- I'm asking you did you do  
16 anything else beyond those two steps?

17 A. No. No. Nothing else beyond those two  
18 steps.

19 Q. Okay. And -- and --

17:55:11 20 A. And we're talking -- I don't want to cut  
21 you off, but --

22 Q. Go ahead.

23 A. -- we're talking about -- in addition to  
24 the citywide we're talking also the census tracts as  
17:55:18 25 well.

1 Q. Yes.

2 A. Okay. I just want to make sure.

3 Q. Because you -- you -- I think you went  
4 into how you distilled down from at large to census  
17: 55: 26 5 tract data and applied socioeconomic factors.

6 A. Right. Where I reviewed the census --  
7 the majority HBA census tracts that were included in  
8 the districts and found that there were  
9 commonalities that existed that the city's reflected  
17: 55: 42 10 also in those census tracts.

11 Q. Nothing beyond that and looking at the  
12 neighborhoods?

13 A. Correct.

14 Q. That's what I was trying to get to.

17: 55: 47 15 A. Okay.

16 Q. Yeah. Did you identify any other  
17 Virginia Beach communities of interest in  
18 determining what to look for?

19 A. No.

20 Q. Okay. Going back to compactness, I  
21 believe your testimony was that there's some  
22 subjectivity to determining what amount of deviation  
23 in compactness is tolerable community by community,  
24 correct?

25 A. Correct.

1 Q. And -- and for purposes of your  
2 conclusion that the illustrative plan adheres to  
3 Virginia code sections relating -- and I'll say to  
4 compactness only --

5 A. Okay.

6 Q. -- as well as visual redistricting --  
7 redistricting criteria, compactness only, what steps  
8 did you do to make yourself comfortable that it  
9 complied with compactness requirements?

17:56:36 10 A. The first step really was -- well, of  
11 course, I produced the port -- report. But the --  
12 the first step really was to compare to the  
13 residency plan, which is the current plan. And I  
14 found that one situation they -- the -- the range of  
17:56:55 15 the illustrative plans for compactness fit inside  
16 the range for the residency plan for District 1.  
17 And District 2 was extremely close.

18 So we're talking about, you know,  
19 comparing it to an existing plan that has been  
17:57:11 20 already approved by the City. And so that gave me a  
21 -- a comfortability that this was a -- a compact  
22 plan. Not to say that if I would have went lower I  
23 -- I would have gone lower and it also probably  
24 would have been within the range of what I had  
17:57:31 25 considered compact. But certainly since these were

1 close to the res -- residency plan or falling within  
2 the residency plan, I felt very comfortable in  
3 saying they were sufficiently compact.

4 Q. So you essentially compared it to  
17:57:48 5 existing districts from 2010 under a seven-district  
6 system and decided that was sufficiently --

7 A. Correct.

8 Q. -- comparable?

9 A. Correct. That was the only plan that  
17:57:56 10 the City had as far as the Council -- City Council.

11 Q. Now, when the City drew the seven-member  
12 district plan in -- in or around 2011 did it draw a  
13 majority-minority district from your perspective?

14 A. I -- I never looked at that. I didn't  
17:58:11 15 look at that.

16 Q. You -- sitting here today, you don't  
17 have knowledge one way or the other?

18 A. No, I don't have knowledge to that.

19 Q. And we get to page 20 of your report,  
17:58:38 20 and that is the illustrative plan with two majority  
21 HBA districts that you prepared for provision in  
22 your expert report, correct?

23 A. Correct.

24 Q. There are no other maps contained in  
17:58:54 25 your expert report, correct, as -- as it relates

1       illustrative plans for two or one majority HBA  
2       districts?

3           A.     Correct.

4           Q.     And you -- you used -- well, did you  
17:59:05  5       make an effort for these two majority HBA districts  
6       to incorporate Ms. Allen and Ms. Holloway's  
7       residencies within the -- one of the two  
8       majority-minority districts?

9           A.     Yes.

10          Q.     Why did you do that?

11          A.     Prior conversations of seeing whether  
12       they were included --

13          Q.     You continued to do that?

14          A.     I continued to do that.

15          Q.     So sitting here today, even if they're  
16       not called out on the map on page 20, you believe  
17       that Ms. Holloway and Ms. Allen's residences were  
18       contained within one of the two districts?

19          A.     I believe so. I believe so.

20          Q.     Okay. But -- but they aren't called  
21       out?

22          A.     They aren't called out.

23          Q.     Now, looking at Table 7, Illustrative  
24       Plan.

18:00:05  25          A.     Okay.

1 Q. Now, I am just trying to follow math at  
2 this point.

3 A. Uh-huh.

4 Q. I'm not trying to examine the -- the  
18:00:14 5 undergirdings of it to the extent it's not  
6 necessary.

7 A. Uh-huh.

8 Q. When I look at the CVAP table for  
9 District 1, correct --

18:00:25 10 A. Uh-huh.

11 Q. -- I see the total CVAP 13 to 17 ACS for  
12 District 1 as 29761, correct?

13 A. Yes.

14 Q. Okay. So my understanding is that if I  
18:00:38 15 -- well, that -- that's -- that's everybody in the  
16 district under your analysis?

17 A. That's the total --

18 Q. Okay.

19 A. -- CVAP.

18:00:45 20 Q. Then we get to the breakdown -- past --  
21 we go past the deviation and the population totals  
22 based on your -- your population target, correct?

23 A. Correct.

24 Q. Then we get to Hispanic CVAP, white  
18:00:56 25 CVAP, black CVAP and Asian CVAP, correct?

1 A. Correct.

2 Q. Now, if I add Hispanic, black and Asian,  
3 I should get to the final column, which is Hispanic,  
4 black, Asian CVAP, correct?

18:01:09 5 A. No.

6 Q. I should not?

7 A. No.

8 Q. Why not?

9 A. Because when I went through the  
18:01:15 10 disaggregation process -- and there's two ways of  
11 doing it. You can disaggregate each of these  
12 Hispanic, black and Asian and then total up at the  
13 end and you would get an equal amount, or you can  
14 total in the beginning Hispanic, black and Asian and  
18:01:33 15 then disaggregate. And what I did was total in the  
16 beginning and disaggregate.

17 And the reason why I did that is because  
18 when you're disaggregating and adding you're adding  
19 up three different disaggregation errors. When you  
18:01:47 20 total in the beginning you're only disaggregating  
21 one. So you'll have one disaggregation error.

22 Q. Okay.

23 A. So that's why the totals don't add up.

24 Q. Okay. So the long -- the long

18:01:59 25 explanation is 2176 plus 9135 plus 3566 was never

1 intended to add up to the number under HBA?

2 A. Correct. Correct.

3 Q. And if you actually add those numbers

4 you do get 14877 not 14888, correct?

18:02:15 5 A. That could be true, yeah. I don't know,

6 but that could be true.

7 Q. And -- and the same thing with District

8 2. If I add 2235 under Hispanic CVAP and 12810

9 under black CVAP --

10 A. Correct.

11 Q. -- and 1367 under Asian CVAP, I would  
12 not expect to get HBA CVAP?

13 A. That's correct.

14 Q. And in fact if I do add those I get  
18:02:40 15 16412 not 16415?

16 A. That -- that could be true.

17 Q. Okay. And so if -- if we were to use  
18 the alternate process of -- of adding afterwards as  
19 opposed --

20 A. Uh-huh.

21 Q. -- to using the before number, you would  
22 actually get a number 14877 for District 1, which  
23 when divided by total CVAP 29761 yields 50.03, I  
24 believe, for one of those.

18:03:14 25 A. Uh-huh.

1 Q. You -- yeah.

2 A. Well --

3 Q. Well, I'm sorry. 148 -- if I could type  
4 it would help.

5 A. Uh-huh.

6 Q. 14877 divided by 29761 yields -- I'm  
7 sorry -- 49.988 percent.

8 MS. HARLESS: Objection to form.

9 BY MR. BOYNTON:

18:03:30 10 Q. That I -- I'm happy to put the  
11 calculator in your hand, sir. I just want you to do  
12 the math.

13 A. Oh, no, no. I -- I -- I trust you to  
14 calculate, but it's a less accurate number.

15 Q. Okay.

16 A. Yeah.

17 Q. But calculating it that way the number  
18 does come back at 49.988, correct?

19 A. That's probably so. Yes.

18:03:46 20 Q. I'm --

21 A. I mean --

22 Q. I'm happy to give you the time to do it.

23 A. No. I -- I trust that you -- you  
24 calculated correctly. Yes.

18:03:51 25 Q. Okay.

1 A. Right. Yeah.

2 Q. And -- and if I do the same process on  
3 District 2, I take the -- the addition of the three  
4 numbers you've given us for Hispanic CVAP, black  
18:04:02 5 CVAP and Asian CVAP, which totals 16412, divide that  
6 by a total CVAP in District 2 of 32804, I get fif --  
7 that's the one I get 50.03 on.

8 A. Uh-huh.

9 Q. And -- and I -- I understand you stand  
18:04:21 10 by the process you used, but --

11 A. Sure.

12 Q. -- you don't quibble with the numbers --  
13 the arithmetic I've employed in my approach?

14 A. No. No. If you -- I assume you're just  
18:04:31 15 adding up the numbers and coming up with a total and  
16 then figuring out a percentage, and I --

17 Q. Uh-huh.

18 A. -- I trust you on -- on that.

19 Q. And the reason you used the before  
18:04:38 20 number for H -- HBA CVAP as opposed to the after  
21 number on HBA CVAP is to minimize the impact of  
22 error from disaggregation?

23 A. Correct. Correct. Disaggregating one  
24 versus three.

18:04:53 25 Q. So that assumes there is some error

1 embedded in disaggregation?

2 A. There's error in every disaggregation  
3 process.

4 Q. So you used the Maptitude just -- this  
18:05:06 5 disaggregation process. Why did you select that  
6 process?

7 A. Because it's -- it's a proficient and  
8 accurate disaggregation process.

9 Q. Is it the only one available?

10 A. No. You can disaggregate in many  
11 different ways.

12 Q. Well, tell me about iterative  
13 proportional fit, which I think is actually  
14 abbreviated IFP not IPF; is that right?

15 A. Yeah. And it -- and it's IPF.

16 Q. Iterative proportional fit.

17 A. Right. IPF. Yeah.

18 Q. So we'll use -- we'll use IPF, which  
19 makes more sense to me.

20 A. Exactly.

21 Q. Did -- you did not do that in your  
22 initial report?

23 A. No.

24 Q. Why did you select one process over the  
18:05:48 25 other?

1 A. Because the Maptitude process is fine  
2 and accurate and proficient. I didn't need to.

3 Q. Is that what you had in your computer?

4 A. It -- it was in the Maptitude program to  
18:05:59 5 do so, and I've used it many times and other  
6 consultants have used it.

7 Q. Do you have the iterative proportional  
8 fit software, if that's the right term?

9 A. No. No.

10 Q. You do not have that software?

11 A. No. No.

12 Q. Do you have --

13 A. No.

14 Q. -- an opinion, sitting here today, as to  
18:06:14 15 which approach, iterative proportional fit or a  
16 Maptitude disaggregation, renders a more accurate  
17 result?

18 A. I -- I would say that they're virtually  
19 the same under these circum -- circumstances. I  
18:06:29 20 know that the Census Bureau uses it, but they use it  
21 in the context of sample data.

22 Q. Uses iterative proportional fit?

23 A. Yes, in the context of sample data.

24 Q. Okay.

18:06:41 25 A. And this doesn't have sample data. And

1 so when I say it doesn't happen, what we're doing is  
2 we're actually looking at static data for the  
3 blocks, not individual records as -- as a survey  
4 sample. And they use it in the context of that, so  
18:06:57 5 there is a difference.

6 Q. So tell me what the benefit is of using  
7 Maptitude versus IPF for disaggregation?

8 A. I don't know if there is a benefit. I  
9 -- I -- as a matter of fact, you know, when I  
18:07:12 10 received the report from Professor Morrison he kind  
11 of validated that both of them are virtually the  
12 same. They're a difference of .04 percent and .08  
13 percent for District 1 and District 2.

14 And so when you think of it, two  
18:07:31 15 different operations coming up with virtually the  
16 same process, he really validated that Maptitude has  
17 an accurate process as long as his was accurate.

18 Q. What benefits, if any, does IPF provide  
19 over Maptitude?

18:07:47 20 A. I -- like I said, I -- I don't know.  
21 All I know is that they came out virtually the same  
22 using two different processes.

23 Q. But virtually the same in each instance  
24 puts them right at or very close to 50.00 percent  
18:08:06 25 for each of these districts using HBA CVAP?

1           A.     Correct, without adding the black and  
2 white. Once you add the black and white, which, you  
3 know, DOJ guidelines is acceptable, you're at 51  
4 percent --

5           Q.     Well --

6           A.     -- just -- just --

7           Q.     Right. So --

8           A.     -- right there.

9           Q.     So again going back to the -- the data  
10          that was originally focused upon --

11          A.     Uh-huh.

12          Q.     -- in your report --

13          A.     Uh-huh.

14                MS. HARLESS: Objection to form.

18:08:29 15          A.     Uh-huh.

16          BY MR. BOYNTON:

17          Q.     -- at page 20 you are presenting this in  
18 the context of HBA CVAP, correct, that table and  
19 that map?

18:08:39 20          A.     Right, but the paragraph right after it  
21 talks about the black and white percentage added.

22          Q.     Understood. And so --

23          A.     Right.

24          Q.     But --

25          A.     So it --

1 Q. But when you did a grid you did a grid  
2 for HBA CVAP, correct?

3 A. The table has that, you're right, but --

4 Q. Okay.

5 A. -- not the -- the -- you have to take  
6 the whole --

7 Q. Uh-huh.

8 A. -- report in context.

9 Q. Understood.

10 A. Right.

11 Q. But going back to what you chose to put  
12 in the table, you were focused on HBA CVAP, correct?

13 A. Correct.

14 Q. And -- and --

18:09:00 15 A. But that's more of a -- I -- I don't  
16 want to cut you off, but that was more of a context  
17 of fitting the table, not necessarily of focusing in  
18 on the CVAP.

19 Q. Well, you would agree that the HBA CVAP  
18:09:13 20 that you put in your table for whatever reason, even  
21 using your approach, says 50.03 and 50.04  
22 majority-minority districts, correct?

23 A. Correct.

24 Q. That all is very close to 50, correct?

18:09:26 25 A. Correct.

1 Q. Okay. And there's a standard deviation  
2 or a margin of error that probably exceeds  
3 three-one-hundredths of a percent for both of these,  
4 correct?

18:09:36 5 MS. HARLESS: Objection to form.

6 BY MR. BOYNTON:

7 Q. You can answer.

8 A. I don't -- don't know.

9 Q. Didn't do the math?

18:09:39 10 A. No. And -- and it -- it's very  
11 difficult -- once you begin to disaggregate the ACS  
12 data it's very difficult to determine what the  
13 margin of error is. They have it how you determine  
14 it for -- the Census Bureau has it how you determine  
18:09:57 15 to keeping whole areas intact, but -- but they don't  
16 talk about how you could determine it with -- broken  
17 down to the block level. So --

18 Q. So, sitting here today, you do not know  
19 what the margin of error is on that 50.03 and 50.04  
18:10:07 20 number you've included in your report?

21 A. No.

22 Q. You did not calculate it --

23 A. No.

24 Q. -- or it was not possible to calculate?

18:10:14 25 A. It -- it -- as I said before, the -- the

1 -- the Census Bureau tells you how to calculate when  
2 you begin to merge and aggregate block or block  
3 groups but not when you actually combine blocks.

4 Let me back up and repeat that.

18: 10: 35 5 They provide you with a formula for  
6 calculating margins of error using the level of the  
7 ACS block group census tract, but not when you begin  
8 to disaggregate down.

9 And so I -- what I'm saying is that it's  
18: 10: 50 10 extremely difficult, if not impossible, to actually  
11 calculate that from ACS data because of the --

12 Q. So you could do it at the block group  
13 level?

14 A. Yes. It -- it --

18: 10: 58 15 Q. Did you do it at -- well --

16 A. Huh?

17 Q. -- I guess you disaggregated so you  
18 couldn't do it for this data.

19 A. Right.

18: 11: 03 20 Q. Okay. And -- and -- but you've already  
21 said disaggregating injects additional area of error  
22 into the analysis, correct?

23 A. Potentially.

24 Q. So your margin of error, if you could  
18: 11: 13 25 calculate it, having done a disaggregation

1 block-by-block approach, can't have a lower standard  
2 of -- of -- of deviation or standard -- margin of  
3 error, can it?

4 MS. HARLESS: Objection to form.

18:11:23 5 A. A -- a lower than --

6 BY MR. BOYNTON:

7 Q. Than the block group level data.

8 MS. HARLESS: Objection to form.

9 A. Don't know. It could be. Depending  
18:11:35 10 upon how it works out it could be because when you  
11 begin to add and subtract it could end up with --  
12 with a margin of error that's closer.

13 BY MR. BOYNTON:

14 Q. And under the top of page 21, that

18:11:59 15 paragraph where you're adding in both black and  
16 white identifiers, people who identify as both, you  
17 get District 1 and 2 percentage yields of 51.11 and  
18 51.08, correct?

19 A. Correct.

18:12:13 20 Q. Did you do a margin of error on those?

21 A. No.

22 Q. Okay. And that's because they include  
23 disaggregated data too?

24 A. Correct.

18:12:20 25 Q. And you would agree that at least the

1 Reock score for compactness for District 2 does fall  
2 outside of the range of any of the current City  
3 Council districts?

4 A. Correct.

18:12:40 5 Q. But you deemed that okay for your  
6 purposes?

7 A. Correct.

8 Q. And -- and anything specific about why  
9 you deemed that okay for your purposes?

18:12:48 10 A. Because it wasn't significantly lower.

11 Q. And in point -- and zero is least  
12 compact and one is most compact; is that right?

13 A. One is most compact, yeah.

14 Q. Okay.

18:13:01 15 A. Zero is least.

16 Q. And on your political subdivision splits  
17 you're analyzing splitting voting -- voter  
18 tabulation districts not neighborhoods, correct?

19 A. Correct.

18:13:29 20 Q. You -- you make a statement, most -- in  
21 most in -- instances neighborhoods were not split,  
22 at the bottom of page 23.

23 A. Correct.

24 Q. Did you do any statistical analysis to  
18:13:44 25 say how many neighborhoods were split?

1 A. No. No.

2 Q. That's your overlay, eyeball, it looks  
3 like it's not too bad?

4 A. Correct. Correct. Visual indication.

18:13:51 5 Q. Turning your attention to your rebuttal  
6 report dated August 26th, 2019, I'd ask you -- it's  
7 Fairfax Exhibit 4. I'm going to put it in front of  
8 you and ask you to review it and confirm it is in  
9 fact your rebuttal report. And it's another thick  
18:15:02 10 one, so feel free to take a moment or two.

11 Does Exhibit 4 appear to be your  
12 rebuttal report, sir?

13 A. Yes.

14 Q. Do you see anything that appears to be  
18:15:52 15 omitted or missing?

16 A. No. I haven't found anything.

17 MS. HARLESS: I'd just like to say on  
18 the record at least the copy I have is not printed  
19 in color.

18:16:02 20 THE DEPONENT: Right.

21 MS. HARLESS: I don't know about what --

22 THE DEPONENT: No, it's not in color.

23 MR. BOYNTON: And -- and that -- if --  
24 if that matters, we will address it at the time.

18:16:10 25 THE DEPONENT: All right.

1 MR. BOYNTON: And I do want to be  
2 mindful of everybody's time, but I also have --

3 THE DEPONENT: Sure.

4 MR. BOYNTON: -- a job to do today,  
5 so --

6 THE DEPONENT: No. You do your job.

7 BY MR. BOYNTON:

8 Q. Okay. So you ultimately were in receipt  
9 of a -- a report from Peter Morrison that was dated  
18: 16: 36 10 August 12th, 2019, correct?

11 A. Correct.

12 Q. You reviewed that?

13 A. Correct.

14 Q. You -- you sometime after that developed  
18: 16: 42 15 a response to the Peter Morrison report which we  
16 will call the rebuttal report?

17 A. Correct.

18 Q. And that's Exhibit 4 today?

19 A. Correct.

18: 16: 50 20 Q. And that was, at least for purposes of  
21 delivery to counsel for the defendants, prepared by  
22 you on August 26th, 2019?

23 A. Correct.

24 Q. Okay. Do you -- well, do you have an  
18: 17: 19 25 estimate of how many hours you put in preparing your

1 first report?

2 A. Preparing the report --

3 Q. The -- the work --

4 A. -- not the plan?

18:17:29 5 Q. Well, the plan and the report that --

6 that informed the initial disclosure.

7 A. I believe it was somewhere between 40 to  
8 50 hours on one -- the initial, and maybe -- let me  
9 -- let me think about this. I think it was a total  
18:18:03 10 of -- a total of 90 hours, I guess, total -- maybe  
11 80 hours total for both of them.

12 Q. So can I extrapolate -- and maybe I  
13 shouldn't extrapolate, especially with a  
14 demographer.

18:18:28 15 A. Yeah.

16 Q. You said 40 to 50 hours for the work  
17 that informed the initial report, including  
18 preparation of the report, correct? Approximation.

19 A. Yeah. I'm trying to -- trying to  
18:18:42 20 approximate. The initial one was more than -- than  
21 the re -- response, and so I'm trying to break it --  
22 break it up into its pieces. And I would say --  
23 let's just say 80-ish hours total and, you know,  
24 40-some to 30-some, let's say. Something like that.

18:19:14 25 Q. 40 to 30 like a split?

1 A. Well, the 40-ish-some to 30-ish-some  
2 might -- you know, it could be 35 to 48 or something  
3 like that. I'm trying to --

4 Q. And that -- that's outside of deposition  
18: 19: 26 preparation --

6 A. Right. Right.

7 Q. -- correct?

8 A. Yeah.

9 Q. And all of those were at an hourly rate  
18: 19: 34 10 of 180 per hour?

11 A. Correct.

12 Q. Okay. You -- you make a statement on  
13 page 3 of your rebuttal report, and this is  
14 responding to Dr. Morrison's, where you say "claim  
18: 20: 22 15 of inconsistent data."

16 You say, "If districts were made up of a  
17 few census blocks..." -- the second paragraph --  
18 "...Dr. Morrison's point might carry more weight.

19 However, the Illustrative Plan's districts and  
18: 20: 34 20 alternative plans' districts are made up of hundreds  
21 of census blocks, which diminishes the census block  
22 data variations to virtually nil."

23 Can you explain that to me?

24 A. What Dr. Morrison is pointing out is the  
18: 20: 51 25 technique that Maptitude uses to disaggregate. And

1 essentially it uses a largest populated block to  
2 allocate the fractions of -- of persons in order to  
3 create integers or whole persons.

4                   And so what happens is that the process  
5 -- the first process is disaggregating using a  
6 weighted amount. So, for example, if there was a  
7 thousand VAP in the block group and a hundred in the  
8 block, then that's a ten-percent weight. And so if  
9 there is 500 CVAP, then it would multiply that

18: 21: 43 10 weighted amount by ten percent and you end up with  
11 50 CVAP for the block. And that's fine unless you  
12 have a fraction. And so when you have fractions  
13 what do you do with that fraction? And what  
14 Maptitude does it assign that fraction to the

18:22:00 15 largest populated block. So if there's 4.5 persons,  
16 it chops off the .5 and adds it to the largest  
17 populated block. And what that does is that allows  
18 integers to be used and not fractions.

19 And so what Dr. Morrison sees is -- when  
18: 22: 17 20 you go down to the block level you see that largest  
21 populated block, that's increased because all those  
22 fractional pieces are added to the block population.  
23 And all of the other populated blocks, even --  
24 although he didn't point this out, are actually less  
18: 22: 32 25 than what they should because they're -- they're --

1 you know, that 5 -- that 4.5 is now four.

2 And so what happens is is that at the  
3 block level, if districts lie at the block level,  
4 which they don't, there would be that error  
18: 22: 44 5 associated with that largest populated block. But  
6 once you begin to aggregate the largest populated  
7 block with those underpopulated blocks the error --  
8 or the largest populated block diminishes the effect  
9 or the impact. The more populated blocks you add

18: 23: 02 10 together the more it diminishes down to virtually  
11 nil or actually -- actually nil when you get to a  
12 block group.

13 So once you begin to aggregate to the  
14 block group that disaggregation of the largest  
18: 23: 15 15 populated block error disappears.

16 Q. How -- how many blocks are in a block  
17 group?

18 A. It could be anywhere -- I think the  
19 average -- I looked at it -- in the city of Virginia  
18: 23: 29 20 Beach was 20-something.

21 Q. The average?

22 A. Average is like 20-something, I believe.

23 Q. Average of 20 blocks in one block group?

24 A. Correct.

18: 23: 35 25 Q. How many block groups are in --

1 A. 20-something, yeah.

2 Q. -- your District 1?

3 A. How many block groups?

4 Q. Yes.

18: 23: 42 5 A. I don't know. I didn't count the block  
6 groups, but I counted the blocks. The blocks are  
7 hundreds.

8 Q. Hundreds are blocks?

9 A. Correct.

18: 23: 49 10 Q. Does that mean you have a dozen block  
11 groups?

12 A. Yeah. I mean, you can kind of calculate  
13 it and come up with an average, I assume.

14 Q. And does your districting in District 1  
18: 24: 02 15 and District 2 of the illustrative plan, the first  
16 one, where you've done the disaggregation to block  
17 level -- do you split block groups in that plan?

18 A. Yes.

19 Q. Okay.

18: 24: 12 20 A. Uh-huh.

21 Q. So it could be that the people that are  
22 added are on one side of the split and who are  
23 subtracted are on the other side of the split,  
24 correct?

18: 24: 20 25 A. Correct.

1 Q. So that would not be re -- removing the  
2 error?

3 A. Right. But what happens is because of  
4 the largest populated block -- and I put this in my  
18: 24: 26 5 report -- is randomly positioned throughout the  
6 city, you have some that are outside and some that  
7 are inside, and they tend to offset each other just  
8 virtually from being in different locations.

9 Q. But you are looking for the blocks that  
18: 24: 42 10 are most HBA CVAP-centric, correct?

11 A. Block groups, I guess.

12 Q. Block -- or blocks too because block --  
13 groups are made up of blocks. And you split block  
14 groups.

18: 24: 55 15 A. Right.

16 Q. So really you're looking for blocks that  
17 are most HBA -- highest concentration of HBA CVAP to  
18 do your map, correct?

19 A. I -- I don't know if I am hesitating  
18: 25: 11 20 because I'm -- I'm -- when I developed the map I  
21 first looked at VTDS and I tried to concentrate  
22 those areas that had the census tracts that had the  
23 -- the majority HBA populations as -- as a whole.  
24 And then as the lower level would be the  
18: 25: 36 25 neighborhood that I look at. So the blocks -- what

1 you're -- when you start to say blocks I'm a little  
2 hesitant in -- on agreeing because I'm trying to  
3 understand what --

4 Q. Well, it's not fully randomized when  
18: 25: 51 5 your goal is to pick the -- the assemblage of blocks  
6 that have the highest HBA CVAP percentages.

7 A. Oh, I see what you're saying. You're --  
8 you're -- let me see if I can understand it. You're  
9 saying that it's not randomized; therefore, the  
18: 26: 07 10 specific blocks in an HBA district would be in a  
11 certain configuration. And I don't think that's  
12 true.

13 Q. I --

14 A. The -- the --

18: 26: 17 15 Q. That's not what I'm saying --

16 A. Okay.

17 Q. -- so I -- I'll stop you.

18 A. Okay.

19 Q. What -- what I'm -- what I'm asking is  
18: 26: 22 20 if I'm a demographic consultant --

21 A. Uh-huh.

22 Q. -- and I've been hired to draw a map  
23 that shows 50.00 percent or more --

24 A. Uh-huh.

18: 26: 33 25 Q. -- of historically -- historically --

1 Hispanic, black, Asian CVAP --  
2 A. Uh-huh.  
3 Q. -- and I've taken it down to block group  
4 level --  
5 A. Uh-huh.  
6 Q. -- and I've disaggregated it to certain  
7 blocks --  
8 A. Uh-huh.  
9 Q. -- and I'm splitting those blocks, I'm  
18: 26: 45 10 not splitting it just to split it. I'm splitting it  
11 to get that -- that number as high as it'll get, as  
12 compact as it'll get?  
13 MS. HARLESS: Objection to form.  
14 BY MR. BOYNTON:  
18: 26: 53 15 Q. You can answer.  
16 A. Right, but I -- I think there's a -- an  
17 assumption that you're making that there isn't a  
18 random aspect to the Hispan -- to Hispanic --  
19 Lord -- to the, yeah, Hispanic, black and Asian  
18: 27: 10 20 block groups. There's no indication that those  
21 Hispanic, black and Asian block groups have a  
22 largest populated block in a particular area. I --  
23 I don't -- I haven't seen any indication to say  
24 that.  
18: 27: 23 25 So creating a Hispanic, black and Asian

1 district should still have this randomization of the  
2 largest block being outside and some largest block  
3 being inside.

4 Q. But -- but your disaggregation is a  
18: 27: 35 5 process that starts with the -- the notion that you  
6 don't know who is in each block, and so you're  
7 trying to break it apart and -- and -- and apply a  
8 -- an algorithm to tell us that, correct?

9 A. No. No.

10 Q. What's the purpose of disaggregation?

11 A. Right. The -- the purpose of -- the --  
12 the real purpose of disaggregation is determining  
13 the percentage at the district level. And -- and  
14 that's really important because disaggregation in  
15 the context of what we're doing really isn't to  
16 determine what the population is at the block level.  
17 What we're doing is we're trying to determine what  
18 the Hispanic, black and Asian population is at the  
19 district level. We have to do that by  
20 disaggregating to the block level.

21 And so the purpose really is not whether  
22 there's an issue at the block level. The purpose is  
23 whether there's an issue at the district level. And  
24 the analysis shows that there isn't a issue at the  
18: 28: 36 25 district level.

1 Q. And you -- just to be clear, you're  
2 saying voting tabulation district, not illustrative  
3 district?

4 A. No. No. I'm talking about the district  
18: 28: 43 5 itself.

6 Q. Oh, the overall.

7 A. Right. I -- the pur -- the reason why  
8 we want to actually -- actually disaggregate is  
9 because we want to know the CVAP for the district,  
18: 28: 55 10 not for the block. We have to disaggregate down to  
11 the block, but really what we're trying to determine  
12 is what is the Hispanic, black and Asian CVAP for  
13 the district. And so along the --

14 Q. Is it -- I'm sorry, but what is that  
18: 29: 06 15 other than a sum of a -- a summation of the blocks?

16 A. Right. But once we sum back up the  
17 error disappears. And that's my whole point.  
18 Because what happens is, yes, down at the block  
19 level there are these largest populated blocks, but  
18: 29: 20 20 as you begin to aggregate them together it  
21 diminishes. And -- and I've shown that  
22 disaggregating with just a straight disaggregation  
23 method and disaggregating using Maptitudes virtually  
24 are identical at the end. You have to go to the  
18: 29: 37 25 third decimal place to see a difference.

1                   So that largest populated block doesn't  
2 really correct -- have -- or re -- doesn't really  
3 have an effect or impact at the district level.

4                   Q.     So, sitting here today, you are  
18: 29: 56        5 confident that you are not repeating the error and  
6 just blowing it up block -- block by block  
7 cumulatively across the district, but actually it's  
8 going to zero. That's your testimony?

9                   A.     A -- a -- going to zero. Not zero, but  
18: 30: 08        10 it's going. It's diminishing. And -- and if you  
11 think about it, it makes sense because each block  
12 group that's wholly contained within the district,  
13 there's a zero disaggregation error of the largest  
14 populated block. So each one. And because when we  
18: 30: 23        15 split we split in a random fashion -- and I know you  
16 talked about the HBA maybe not splitting in a random  
17 fashion, but I've seen no indication that splitting  
18 because it's an HBA district doesn't still mean that  
19 you're randomly putting that block -- that largest  
18: 30: 39        20 populated block on the outside sometimes and on the  
21 inside sometimes.

22                  Q.     You make a statement in the next  
23 paragraph on page 3, "In addition to the  
24 Illustrative Plan that I included in my initial  
18: 31: 53        25 report, it is possible to draw a number of

1 additional alternative plans with two majority HBA  
2 CVAP districts," correct?

3 A. Correct.

4 Q. And then you say, "When analyzing all of  
18: 32: 06 5 the plans using total population, VAP, and CVAP,  
6 there are only two instances where the HBA  
7 percentages are below 50%."

8 What -- what are you explaining there?

9 A. Now, could you point me in the right  
18: 32: 19 10 paragraph?

11 Q. I'm sorry.

12 A. I'm sorry.

13 Q. "In addition to..." -- it starts --

14 A. Where?

18: 32: 22 15 Q. -- "In addition to..."

16 A. Oh, right here?

17 Q. Yes.

18 A. Okay.

19 Q. And go ahead and review it.

18: 32: 29 20 A. Okay. Well -- well, what I'm referring  
21 to, if you look at the tables in the back,  
22 practically the totals for each of those plans, the  
23 illustrative plan including the alternative plans,  
24 and you look at the voting age percentage, CVAP, and  
18: 33: 00 25 A -- and VAP, there were only two instances where

1       the Hispanic, black and Asian percentage were below  
2       50 percent. So all of the other metrics, I guess,  
3       of whether this is a majority HBA district showed  
4       that all of them except for two were above 50  
18: 33: 23 5 percent essentially.

6           Q.     So -- so let's talk about that. You're  
7       -- you're looking at the il -- illustrative plan,  
8       which I understand to be the original or the initial  
9       report's plan.

18: 33: 34 10          A.     Correct.

11        Q.     And then you are saying there are a  
12       number of additional alternative plans with two  
13       majority HBA CVAP districts. Are those the  
14       alternative plans that are included for the first  
18: 33: 44 15 time in your rebuttal report?

16        A.     Correct.

17        Q.     Okay. Those were not provided in the  
18       initial report?

19        A.     Correct.

18: 33: 49 20        Q.     They were not existing and -- or at the  
21       time the initial report was provided?

22            MS. HARLESS: Objecting to the extent  
23       you're asking about draft reports or draft analyses.  
24       BY MR. BOYNTON:

18: 33: 59 25        Q.     When did you first prepare the districts

1 -- or the alternative plans that were provided in  
2 the -- in the rebuttal report?

3 MS. HARLESS: So objecting to the extent  
4 that you're asking about draft analyses and draft  
18: 34: 11 5 reports. If you can answer subject to that, you  
6 can, but if not I'm instructing you not to answer.

7 BY MR. BOYNTON:

8 Q. Okay. So with respect to -- were these  
9 reports in existence -- or these alternative plans  
18: 34: 10 in existence on July 15, 2019?

11 MR. HARRIS: Same objection.

12 BY MR. BOYNTON:

13 Q. You can answer.

14 A. Well, let me -- let me say that, as I  
18: 34: 15 mentioned in the initial report, there were other  
16 configurations. And so along the way of developing  
17 a plan you have many different options that you look  
18 at. This is just the process of developing  
19 redistricting plans.

18: 34: 48 20 And so those plans in there, except for  
21 one, which was the block group one, I had come  
22 across somewhere in the, you know, plan development.  
23 You -- you know, they're not full plans. You  
24 don't -- you know, you don't print them out, but you  
18: 35: 07 25 come across configurations as you're actually

1 developing a plan. It's just the process of  
2 redistricting.

3 And so I recalled those plans and  
4 recreated those again except for the -- the block  
18: 35: 20 5 group plan.

6 Q. But none of those were provided in the  
7 initial report?

8 A. No. Correct.

9 Q. And -- and the block group one did not  
18: 35: 26 10 exist in any shape or form until after July 15,  
11 2019?

12 A. Correct. I specifically di -- created  
13 that because of Dr. Morrison's issue with  
14 disaggregation. And that was a plan created that  
18: 35: 41 15 had no disaggregation to show that you could create  
16 a plan without disaggregating.

17 Q. And Alternative 2 is the only of your  
18 alternative plans that provides block group level  
19 data or that -- that uses -- that relies on block  
18: 35: 58 20 group level data to generate the map?

21 A. That -- that doesn't split block groups,  
22 yeah.

23 Q. You -- you make a statement in the  
24 second-to-last paragraph on -- still on page 3 --

18: 36: 57 25 A. Okay.

1 Q. -- "It is also possible to draw plans  
2 with at least one HBA majority CVAP district, which  
3 is still more than contained in the current City  
4 Council plan (which has zero)."

18:37:13 5 Did you independently analyze whether  
6 the current City Council plan actually had zero or  
7 did you make an assumption?

8 A. I -- I looked at the plan and I did not  
9 see a majority HBA CVAP district in the residency  
18:37:46 10 plan.

11 Q. From the 2010 re -- or 2011  
12 redistricting of City Council?

13 A. Yes, the -- the residency plan that was,  
14 yeah, created.

18:37:54 15 Q. To -- to -- to your understanding, based  
16 on your analysis --

17 A. Uh-huh.

18 Q. -- none of the seven current City  
19 Council districts were HBA majority CVAP as of their  
18:38:08 20 creation?

21 A. I can make a determination because I  
22 have that in here, don't I, and I can tell you for  
23 sure.

24 MR. BOYNTON. Let the record reflect  
18:38:36 25 that the witness is reviewing Exhibit 2.

1           A.     Yes. That's correct. I do not see a  
2 majority HBA CVAP district in the current residency  
3 plan.

4 BY MR. BOYNTON:

18: 38: 51   5           Q.     And, to be clear, you are relying upon  
6 what page of your report that -- I think it was  
7 on --

8           A.     Page 69.

9           Q.     I'm sorry. Page what?

18: 38: 59   10          A.     Of the initial report.

11          Q.     Of the -- okay.

12          A.     Yeah. The initial report.

13          Q.     Page 69?

14          A.     Yes.

18: 39: 11   15          Q.     And that is specifically --

16          A.     The third table down at the bottom to  
17 the far right. And you'll see HBA CVAP 17. And 17  
18 really just reflects the last part of 2013-2017.

19          Q.     So when you say 17 you're looking at the  
18: 39: 33   20          ACS data, you're not looking at the 2010 census  
21 data, correct?

22          A.     Correct. Correct. The most --

23          Q.     And so --

24          A.     The current data, that's correct.

18: 39: 43   25          Q.     So on the metric of HBA CVAP calculated

1 under ACS data you're not seeing 50-plus percent?

2 A. That's correct.

3 Q. Okay. All right.

4 A. And -- and I don't see it with the  
18: 39: 55 5 voting age as -- as well. The 2010 data doesn't  
6 show it as well.

7 Q. And --

8 A. And the total population doesn't show it  
9 as well.

10 Q. Where -- where are those?

11 A. Those are up at the top. If you look at  
12 the -- the two tables, you have one that's got HBA  
13 total percentage. That's 47.97. And then the VAP  
14 is 47.28 percent. For the highest one I'm looking  
18: 40: 17 15 at.

16 Q. And those are based on which dataset?

17 A. 2010.

18 Q. 2010-2011?

19 A. Yeah. These -- the top two are 2010.

18: 40: 25 20 The bottom is the HBA five-year ACS.

21 Q. And that -- that goes to whether one was  
22 drawn not whether one was possible to be drawn,  
23 correct?

24 A. Right. Correct. This is the existing  
18: 40: 34 25 plan. Yeah. I have no idea of what potentially was

1 drawn.

2 Q. Let's go to your Alt 1 plan on page 5.

3 What informed the configuration of plan Alt 1?

4 A. The purpose of this was to really show  
18: 41: 57 5 that, you know, minor changes could be made to the  
6 illustrative plan and the percentage of HBA could be  
7 increased to a sufficient amount.

8 Q. Did you independently verify that both  
9 Ms. Holloway and Ms. Allen still reside in Figure 1?

18: 42: 21 10 MS. HARLESS: Objection to form.

11 BY MR. BOYNTON:

12 Q. All right. And I'll -- I can rephrase  
13 to make that clearer.

14 Did you independently determine that the  
18: 42: 36 15 illustrative Alternative 1 plan -- the addresses  
16 known to you for Ms. Allen and Ms. Holloway were  
17 included in one of the two illustrative districts?

18 A. I -- I did not look at that. That  
19 wasn't one of my objectives.

18: 42: 55 20 Q. Can you say, sitting here today, if one  
21 or both live inside of or outside of the  
22 illustrative districts?

23 A. It appears that they do, but -- yeah.

24 Q. You base the appearance on what?

18: 43: 12 25 A. The map that you showed me earlier.

1 Q. So let's look at Appendix A of the  
2 original complaint, which is Exhibit 1. Go to page  
3 18.

4 And I'd ask you -- and I'll be happy to  
18: 44: 06 5 show you the color version if I can move without  
6 messing up the microphone because that may be  
7 helpful. The color version on page 6 of Exhibit 4,  
8 I believe.

9 MS. HARLESS: Yeah.

10 BY MR. BOYNTON:

11 Q. So what I'm asking you to do is to  
12 compare the location of the two red dots in Appendix  
13 A to the amended complaint, which is Exhibit 1, to  
14 the configured district Figure 1 in -- which is also  
18: 44: 35 15 Alternative 1 in your rebuttal report. I'm asking  
16 particularly about the easternmost red dot. Does  
17 that appear to be located within either of the  
18 Alternative 1 plan majority-minority districts?

19 A. It's -- it's hard for me to tell, but  
18: 44: 57 20 I'm trying to find the reference points.

21 Let -- let me -- may I look at it  
22 closer?

23 Q. You -- you certainly may.

24 A. Let me see.

25 18: 45: 40 All right. They -- it may be poten --

1 it may be -- one may be potentially out, now that  
2 I'm -- now that I'm looking at it.

3 Q. And you don't know, sitting here today,  
4 if that's Ms. Allen or Ms. Holloway?

18: 45: 56 5 A. I have no idea.

6 Q. Okay.

7 A. No. Yeah, but it's -- it's difficult  
8 for me to be absolutely sure.

9 Q. Understood. Thank you.

18: 46: 09 10 Going back to -- not going back to, but  
11 we're talking about Figure 1, which is Alternative 1  
12 plan in your rebuttal report. Can you tell me what  
13 the margin of error is for that particular data  
14 that's relied upon for HBA CVAP?

18: 46: 48 15 MS. HARLESS: Objection to form.

16 A. No.

17 BY MR. BOYNTON:

18 Q. Can you tell me what your confidence  
19 interval is for the data relied upon for HBA CVAP  
18: 46: 57 20 for those two districts in Alternative 1?

21 A. No.

22 Q. Is that something that you didn't try to  
23 calculate or you couldn't calculate or both?

24 A. It's one of those things that I have not  
18: 47: 10 25 seen in normal plan development for redistricting

1 plans.

2 Q. Is it -- is it not something you  
3 routinely calculate?

4 A. No. No. I -- matter of fact, I haven't  
18: 47: 21 5 seen it.

6 Q. Have you ever done that calculation?

7 A. Maybe a long time ago as far as not  
8 district concerns but other areas of confidence  
9 levels. But I have not seen any confidence level  
18: 47: 34 10 being produced in a proposed district plan out of  
11 the hundreds that I have seen.

12 Q. What is the compactness rating for  
13 Alternative District 1 and Alternative District --  
14 I'm sorry -- Alternative 1, Districts 1 and 2?

18: 47: 52 15 A. For Alternative 1 --

16 Q. Yes.

17 A. -- for District 1 and 2?

18 Q. Yeah. I understand there are three  
19 different measures, but...

18: 48: 03 20 A. Hold on. Let me see. I'm not sure that  
21 I have -- I think that's on page -- I think it's on  
22 page 29, I believe. Let's see.

23 And so District 1 includes .31 Reock, .2  
24 Polsby-Popper and .58 for Convex Hull. And District  
18: 49: 07 25 2 is .20, .16 and .54 for Convex Hull.

1 Q. Are those more or less compact than your  
2 illustrative districts in the original plan?

3 A. Overall I would say they were less.

4 District 1 is close, but -- close to the same.

18:49:37 5 Q. Did you do a communities of interest  
6 analysis for Alternative 1?

7 A. No. No more than the visualization of  
8 the -- the neighborhoods.

9 Q. You don't know, sitting here today, how  
18:49:51 10 many neighborhoods are split to draw alternative  
11 district -- I'm sorry -- Alternative 1 in two  
12 districts?

13 A. No. No. But one -- once again using  
14 visualization it wasn't that many. It's hard to  
18:50:06 15 tell on a black-and-white --

16 Q. Uh-huh.

17 A. -- map here, though.

18 Q. As you were making the changes from the  
19 one illustrative plan that was provided in the  
18:50:30 20 original report to Alternative 1 in your rebuttal  
21 report what considerations did you include that  
22 informed the change other than race?

23 A. Oh. I'm -- I'm always looking at  
24 compactness and political subdivision splits.

18:50:52 25 Q. So why -- why --

1 A. So --

2 Q. -- did you provide Alternative 1 instead  
3 of the original -- relying on the original plan?

4 A. Oh. The -- it was a dem -- a  
18: 51: 03 5 demonstrative plan to show that you could make some  
6 minor changes and come up with a -- a -- a plan that  
7 had an HBA percentage that was higher. So it was  
8 just a minor-change plan because the discussion was  
9 around the 50 percent.

18: 51: 32 10 Q. Were the changes that you made from the  
11 first plan to Alternative 1 based on anything other  
12 than race?

13 I know you considered everything, but --

14 A. Right. Right.

18: 51: 41 15 Q. -- the illustration was to provide a --  
16 a minority -- a majority-minority district, correct?

17 A. Sure. Sure. I mean, yeah. You know, I  
18 -- I used the same criterias that I used before.

19 It's just that one of the things would show that the  
18: 51: 54 20 percentage would be higher. And so it ended up  
21 being less compact and maybe a -- a split more, I  
22 believe, of -- of VTDs.

23 Q. Okay. Turning your attention to  
24 Alternative 2 -- and I'll tell you you make it  
18: 52: 17 25 challenging when you put your text for Alternative 2

1 on the same page as your figure for Alternative 1,  
2 but I will hopefully not confuse you when I go  
3 through it all.

4 A. I know. I know. Yeah. It's -- let me  
18: 52: 31 5 see.

6 Q. So Alternative 2 is the one for which  
7 you used block-group-only data?

8 A. Yes.

9 Q. And -- and your purpose in preparing  
18: 52: 43 10 that map was what?

11 A. The purpose was to show -- since there  
12 was an issue with disaggregation and the process of  
13 Maptitude including an error, then I -- I thought  
14 I'd show a plan where you could eliminate the error  
18: 53: 00 15 associated with that disaggregation and create a --  
16 a Hispanic, black and Asian -- two Hispanic, black  
17 and Asian combined districts.

18 Q. And what are the benefits and detriments  
19 of using block-group-only data versus disaggregated  
18: 53: 21 20 block data?

21 MS. HARLESS: Objection to form.

22 BY MR. BOYNTON:

23 Q. You can answer.

24 A. The benefits is exactly what I just  
18: 53: 29 25 explained, is -- the purpose was to show that one

1 could be created with block groups only.

2                   The disadvantage is that you're somewhat  
3 hamstrung -- hamstrung by the configuration of the  
4 block groups. And so they're not necessarily  
18: 53: 47 5 configured properly let's say in a compact fashion  
6 let's say.

7                   Q.     So your -- your compactness goes way  
8 down when you use that approach?

9                   A.     It -- it probably suffers because you're  
18: 54: 00 10 forced if you're trying to force block groups only.

11                  Q.     And what -- what's the impact on -- on  
12 your -- your district plans in terms of communities  
13 of interest when you go to block groups?

14                  A.     Well, actually, it's -- it's -- remains  
18: 54: 15 15 the same or it's better because block groups tend to  
16 actually contain neighborhoods.

17                  Q.     What were the compactness ratings for  
18 Figure 2?

19                  A.     .32 for Reock, .21 for Polsby-Popper and  
18: 54: 52 20 .61 for Convex Hull. And then District 2 was .20,  
21 .15 and .49 for Convex Hull.

22                  Q.     So --

23                  A.     Reock, Polsby-Popper and Convex Hull.

24                  Q.     So also less compact than the  
18: 55: 09 25 illustrative plan that was contained in your initial

1 report?

2 A. Yes. District -- District 1 actually  
3 increased, I believe, with the Convex Hull. And  
4 District 1 also had Polsby-Popper, I believe --  
18: 55: 26 5 believe approx -- approximately the same or higher.

6 So District 1, I think, wasn't worse.

7 District 2 might have been lower compactness.

8 Q. Okay. And can you tell me if  
9 Ms. Holloway and Ms. Allen both reside in either  
18: 55: 45 10 majority-minority district in Figure 2?

11 A. I -- once again it -- it's very  
12 difficult for me to -- to say, but I'll say  
13 potentially one of them may be out.

14 Q. Okay. No -- no margin of error for --  
18: 56: 16 15 calculated for Alt 2, correct?

16 A. Correct.

17 Q. No confidence interval calculated for  
18 mar -- for Alt 2, correct?

19 A. Correct.

20 (Off-the-record discussion between the  
21 reporter and Mr. Boynton.)

22 BY MR. BOYNTON:

23 Q. For Alternative Plan 2 you did not  
24 calculate a margin of error, correct?

18: 56: 40 25 A. Correct.

1 Q. For Alternative Plan 2 you did not  
2 calculate a confidence interval, correct?

3 A. Correct.

4 Q. And -- and to save a question, you did  
18: 56: 50 5 not for any of the alternative maps provided in your  
6 rebuttal report calculate a margin of error or a  
7 confidence interval, correct?

8 A. Correct.

9 Q. Yeah. And -- and just to make sure I  
18: 57: 08 10 didn't ask it before, with respect to the map that  
11 was prepared and submitted in the original report,  
12 did you perform a margin-of-error calculation?

13 A. No.

14 MS. HARLESS: Objection, asked and  
18: 57: 20 15 answered.

16 BY MR. BOYNTON:

17 Q. Did you perform with respect to the  
18 original report a calculation of confidence interval  
19 for the illustrative plan?

18: 57: 29 20 MS. HARLESS: Objection, asked and  
21 answered.

22 A. No.

23 BY MR. BOYNTON:

24 Q. Why did you choose to use disaggregated  
18: 57: 43 25 block data instead of block group data in your

1 original report?

2 A. Excuse me. Can you repeat that again?

3 Q. Yeah. We're comparing the --

4 A. Uh-huh.

18: 57: 53 5 Q. -- illustrative plan contained in the

6 original report --

7 A. Uh-huh.

8 Q. -- versus Alternative 2 contained in the  
9 rebuttal report. The initial report relies on

18: 58: 04 10 disaggregated block level data, correct?

11 A. The original report does.

12 Q. Okay.

13 A. Correct.

14 Q. The Alternative 2 relies on block group  
18: 58: 14 15 level data, correct?

16 A. Correct.

17 Q. Why did you choose to use disaggregated  
18 block level data for your original report instead of  
19 block group level data?

18: 58: 24 20 A. Oh. Because usually you do not build  
21 plans at the block group level. You build them at  
22 the VTD level, the precinct level, which is  
23 synonymous.

24 Q. So you believed that using disaggregated  
18: 58: 39 25 block level data was the best approach at that time?

1 MS. HARLESS: Objection to form.

2 A. And I'm -- I'm trying to -- to  
3 understand your question. Usually you build at the  
4 VTD or precinct level, which is synonymous, and then  
18: 58: 58 5 when you have to you split those VTDs. And so  
6 normally you do not build at the block group level.

7 And disaggregation is a separate  
8 question.

9 BY MR. BOYNTON:

18: 59: 16 10 Q. And -- and fair enough. And I'm just --

11 A. Yeah. Yeah.

12 Q. -- trying to a --

13 A. Yeah.

14 Q. -- trying to get at, and it --

15 A. Yeah.

16 Q. -- maybe it's a simple why question --

17 A. Right.

18 Q. -- why did you use block level data in  
19 your original report instead of block group level  
18: 59: 32 20 data?

21 A. Because you have to split VTDs to draw  
22 two majority HBA districts, and you have to split  
23 them in order to meet the population deviations. So  
24 the -- from what I've seen you can't create two  
19: 00: 00 25 majority HBA districts without splitting. You can

1 create one, though. So that's the next one I guess  
2 we're going to get to.

3 Q. Uh-huh. Uh-huh.

4 A. But you can create one without splitting  
19:00:12 5 a voting district.

6 Q. That's fine.

7 So switching then to Alt 3, and -- and  
8 that I believe the -- the narrative is on page 7.

9 A. Uh-huh. Yeah.

10 Q. What was your purpose in generating Alt  
11 3 in the rebuttal report?

12 A. One, I wanted to show, as I mentioned  
13 before, that there are a variety of configurations  
14 that could be made by two majority Hispanic, black  
19:00:51 15 and Asian CVAP districts. And these two come from  
16 sort of different areas -- or one of them comes from  
17 a different area, just to show that there are  
18 multiple ways of doing so. You're not stuck with  
19 one particular way of -- of -- of developing the  
19:01:08 20 district. And so that was a -- a -- a primary  
21 reason.

22 The -- the other one is that 3 also use  
23 -- uses -- 3 also is a majority Hispanic, black VAP  
24 district, not CVAP district. And so Alt 3 also  
19:01:36 25 reveals that in 2010 a -- a district such as this

1 could have been created at the time using the data  
2 that they had.

3 Q. Dividing seven or dividing ten ways?

4 A. Ten. All of these are ten-district  
19:01:55 5 plans.

6 Q. In figure 3 do you -- are you able to  
7 tell whether Ms. Allen and Ms. Holloway both live in  
8 Districts 1 or 2?

9 A. I'm not able to tell, but once again one  
19:02:19 10 may be out.

11 Q. And that would be the easternmost one?

12 A. Yes.

13 Q. What is the compactness -- I'm sorry.

14 Yeah, we've already established that you didn't do a  
19:02:29 15 margin of error or a compactness -- I'm sorry -- a  
16 confidence interval for plan 3, correct?

17 A. Yes. Yes. Correct.

18 Q. Going to page 43, which I believe is  
19 your compactness report for Alt 3.

19:02:46 20 A. Yes. So we have .14 for Reock,  
21 Polsby-Popper .14 and Convex Hull .49. And then for  
22 District 2, .12, .12, and then .41 for Reock,  
23 Polsby-Popper and Convex Hull.

24 Q. So you're -- you're losing a fair amount  
19:03:10 25 on compactness on both 1 and 2 under this map as

1 compared to the original illustrative plan?

2 A. That is correct.

3 Q. And Districts 1 and 2 are far and away  
4 the least compact of the ten districts you proposed  
19:03:27 5 in Alternative 3, correct?

6 A. I don't know. I can check that, but I  
7 don't know offhand.

8 Q. I'm just looking at the ten stacked  
9 up --

19:03:36 10 A. Oh, you're talking about then -- the ten  
11 out of these districts. Yes. Yes.

12 Q. Well --

13 A. I thought you --

14 Q. -- District 1 and 2 are far and away the  
19:03:43 15 least compact of those two districts?

16 A. Correct.

17 Q. So then we get to Alternative 4, and  
18 that's where you draw a single majority-minority  
19 district, correct?

19:04:03 20 A. Correct.

21 Q. And I need to be clear. Figure 3 was  
22 where we're using block level data again? We're not  
23 using block group data to generate the districts,  
24 correct?

19:04:16 25 A. Correct.

1 Q. Okay.

2 A. Correct.

3 Q. And same thing with 4? We're at block  
4 level data not block group data for 4?

19:04:24 5 A. 4 is VTDs.

6 Q. Okay. So what does that mean as to  
7 block versus block group level data?

8 A. Now, let me -- let me back up and make  
9 sure we're on the same page here.

19:04:36 10 All of these plans are using the same  
11 disaggregated data. There was just one plan where I  
12 used or assembled block groups in order to create  
13 the district plan, but all of them use the same  
14 disaggregation process.

19:04:55 15 Q. So my question then I guess -- and  
16 that's Alternative 2 that you're referring to,  
17 correct?

18 A. Uh-huh.

19:05:04 19 Q. And for Alternative 2 do you  
20 disaggregate and reaggregate or do you do -- use the  
21 original block group numbers?

22 A. Yeah. The process that Maptitude does  
23 is it dis -- disaggregates down to the block level,  
24 then it reaggregates, or aggregates really, up to  
19:05:16 25 all the other levels, including block group, census

1 tract, VTD, county. If there was a place in there  
2 it would aggregate to that. So all of those levels  
3 now have this -- the aggregated CVAP data.

4 Q. So it is not the original block group  
19:05:33 5 data. It is block group data that has gone through  
6 a process of disaggregation and then aggregation,  
7 correct?

8 A. Correct, except for the block group  
9 data. When you -- if you build a district on block  
19:05:45 10 group, the block groups have no disaggregation error  
11 because it is the same level that's brought in. So  
12 one of the Maptitude's -- the reason why they did  
13 what they did is when you sum up all of these block  
14 pieces and you get to the block group level you're  
19:06:04 15 at the same level that you were before when you  
16 brought the data in.

17 Q. And the data is the same as those  
18 brought in at -- on the block group level?

19 A. At the block group level, right, or in  
19:06:14 20 the tract. The tract is the same way. Anything  
21 that's a derivative of block groups would be with no  
22 disaggregation level. So, hence, if you build a  
23 district with block groups, then you don't have the  
24 disaggregation data. And that's the reason why I  
19:06:28 25 built one of them.

1 Q. Well, what is the purpose of  
2 disaggregating and reaggregating when you're  
3 building a district from block groups?

4 A. Well, you -- you have to reaggregate to  
19: 06: 38 5 determine what the district CVAP is. You have to  
6 aggregate, rather, not reaggregate. Sorry. You  
7 have to aggregate back up to determine what the  
8 district population is.

9 So that's the process of really  
19: 06: 50 10 determining what the -- the citizen voting age  
11 population is. You begin to aggregate those blocks.  
12 And when you reach the district level you know that  
13 this is the level of CVAP for that particular  
14 district.

19: 07: 03 15 Q. I think I understand.

16 A. Okay.

17 Q. But -- not but.

18 A. Uh-huh.

19 Q. The only illustrative plan that's been  
19: 07: 16 20 presented that purports to draw illustrative  
21 districts off of block group level data is  
22 Alternative 2, correct?

23 A. Right. Correct.

24 Q. Okay.

19: 07: 30 25 A. I believe it was 2. Let me make sure of

1 that.

2 Yes, Alternative 2. That's correct.

3 Q. What was your purpose in drawing  
4 Alternative 4?

19:07:47 5 A. Alternative 4 was a plan that was  
6 designed only with VTDs, with no split VTDs. And  
7 the rationale for that was -- I -- I -- well, I  
8 don't know how to say this without a conversation.

9 If there was a State guidelines to not  
19:08:27 10 split VTDs, then you could still create a majority  
11 Hispanic, black and Asian combined district without  
12 splitting VTDs.

13 Q. Here too, though, you're using VTDs as a  
14 estimation of precincts, correct?

19:08:52 15 A. Yes.

16 Q. It's not exact as to precinct  
17 boundaries?

18 A. Yes. And I didn't -- I didn't overlay  
19 the precincts because many precincts were exactly  
19:09:04 20 the same as VTDs. It could be that these actually  
21 match up to the ones that are exactly the same.

22 Q. But you didn't do that analysis?

23 A. No, I didn't do that analysis.

24 Q. So, sitting here today, you can't tell  
19:09:16 25 us?

1 A. No, I can't tell you.

2 Q. And -- and this purports to represent a  
3 single majority HBA combined CVAP, correct?

4 A. Correct.

19:09:31 5 Q. And in -- in terms of calculating the  
6 HBA CVAP percentage, you're still using 2017 data,  
7 cor -- or the -- the ACS data not the 2010 census  
8 data; is that --

9 A. The five-year data, yes. Correct.

19:09:59 10 Q. But you're relying on 2010 VTDs?

11 A. Yes.

12 Q. Okay.

13 A. Yes.

14 Q. What is the compactness of that in  
19:10:19 15 Figure 4?

16 A. Point -- for Reock it was .19,  
17 Polsby-Popper .11 and Convex Hull .47.

18 Q. Again less compact under every measure  
19 than the original illustrative plan from the  
19:10:46 20 original report?

21 A. Less compact, yes.

22 Q. Is there a point you get to where you  
23 just say, "This is so not compact I can't support  
24 the district"?

19:10:58 25 A. There -- sure, there is a point. I

1 didn't get to it with these plans, but there's a  
2 point.

3 Q. Tell me what that point looks like from  
4 where you sit.

19:11:07 5 A. I -- I would have to actually think  
6 about it. I -- I've seen approved plans with worse  
7 compactness measures than these.

8 Q. Okay. Where -- where have you seen  
9 them?

19:11:22 10 A. Oh. Throughout, many times, yeah.  
11 This, for example, isn't such a crazy district as  
12 I've seen before throughout the -- the states.

13 Q. Have you seen anywhere in Virginia?

14 A. I don't know. I don't know. I'd have  
19:11:42 15 to think about that.

16 Q. Sitting here today, you can't think of  
17 anything in Virginia?

18 A. Yeah. I can't think of anything in --  
19 in Virginia, although -- no. I take that back. In  
19:11:51 20 the state legislative plans in -- for Bethune-Hill,  
21 the original plans had some crazy districts in it,  
22 so --

23 Q. And -- and they were set aside on  
24 constitutional --

25 A. Yeah.

1 Q. -- reasons, correct?

2 A. Yeah. Uh-huh. Yep. They were much  
3 worse than these.

4 Q. Then we get to Alt 5. What was your  
19:12:18 5 purpose in preparing Alternative 5?

6 A. The purpose was to show that a Hispanic  
7 and black CVAP district could be created.

8 Q. Taking out Asian voters?

9 A. Exactly.

19:12:30 10 Q. And you used block level data for this  
11 one?

12 A. Disaggregated down, exactly, and  
13 aggregated back up.

14 Q. What is your purpose in removing the  
19:12:50 15 Asian communities from the -- that map?

16 A. Just to show that Hispanic and black  
17 could form a particular district.

18 Q. And so that -- that map by itself is  
19 totally different than any other map you prepared?

19:13:11 20 A. Correct.

21 Q. And outside of the original scope of  
22 what you were asked to do in the case?

23 MS. HARLESS: Objection to form.

24 BY MR. BOYNTON:

19:13:18 25 Q. You can answer it.

1           A.     It's outside of the original ask, yes,  
2 if you specifically talk about Hispanic, black and  
3 Asian.

4           Q.     The compactness ratings, I believe, for  
19: 13: 42    5 District 5, Alternative -- I'm sorry -- Alternative  
6 Plan 5 are at page 56, I believe.

7           A.     For Reock it's .11, for Polsby-Pop --  
8 Popper it's .09 and Convex Hull it's .42.

9           Q.     And -- and that -- that's the lowest  
19: 14: 20 10 overall compactness for any of the plans you've  
11 prepared in this case, correct?

12          A.     Correct.

13          Q.     Have we reached your threshold for not  
14 being sufficiently compact to survive scrutiny?

19: 14: 31 15          A.     This is close. This is certainly close  
16 to that.

17          Q.     Can you tell me what impact Alternative  
18 5 has on communities of interest? Did you do a  
19 communities of interest analysis for number 5?

19: 14: 47 20          A.     Oh. Oh. No, other than the  
21 visualization.

22          Q.     You did -- you overlaid the -- the  
23 subdivision map on each of these maps?

24          A.     Correct.

19: 14: 54 25          Q.     Can you tell me which map was -- was

1 worst for preservation of communities of interest?

2 A. I didn't analyze that. If you're  
3 looking at me to guess at this moment or give you an  
4 answer --

19:15:13 5 Q. Would it be surprising to you that  
6 splitting communities of interest in -- some of  
7 these split up as many as 23 neighborhoods?

8 A. As district -- or Alternative 5 or --

9 Q. One of the al -- at least one of the  
19:15:27 10 alternatives provided.

11 A. You -- you're talking about you don't  
12 know which one or one of the alternatives did that?

13 Q. Yes. I'm asking you if you know if any  
14 of them do that.

19:15:37 15 MS. HARLESS: Objection to foundation.

16 A. It would not surprise me if they did  
17 that. And -- and part of the reason for that is the  
18 VTDs actually end up splitting some neighborhoods.

19 And so if you're following along VTD lines, then  
19:15:55 20 many times you'll end up splitting neighborhoods.

21 So it's -- it's a juggling act that you actually  
22 perform.

23 (Off-the-record discussion between  
24 defense counsel)

25 MR. BOYNTON: Yeah, yeah, yeah. Okay.

1 I know.

2 MR. STILES: Oh, I'm sorry.

3 MR. BOYNTON: We're still going.

4 MR. STILES: Excuse me.

19:16:36 5 BY MR. BOYNTON:

6 Q. You had the data to draft -- to draft  
7 all five alternative plans prior to July 15, 2019,  
8 correct?

9 A. You're talking about the --

19:16:45 10 Q. Alternative plans.

11 A. You're talking -- yes. You're talking  
12 about the -- all the data that we talked about in --  
13 in the report?

14 Q. Correct.

19:17:03 15 A. Yeah. Yes, I had it prior to July  
16 25th -- - prior to the -- the initial report is I  
17 think what you're talking about. Yes.

18 Q. But for whatever reason you did not  
19 include any of those plans in your original report?

19:17:15 20 A. Correct.

21 Q. And, sitting here today, without getting  
22 into draft conversa -- conversations about drafts --

23 A. Right.

24 Q. -- you -- you -- you can or can't tell  
19:17:28 25 me which ones -- which of these plans actually

1 existed in the form provided in your rebuttal report  
2 prior to July 15, 2019?

3 MS. HARLESS: Same objection as earlier,  
4 to the extent you can answer that without discussing  
19:17:42 5 communications with attorneys --

6 MR. HEBERT: Or draft analyses.

7 MS. HARLESS: -- or draft analyses.

8 A. Right. And, as I said before, that, you  
9 know, I -- as I developed these plans I had various  
19:17:55 10 configurations. And so none of these plans were in  
11 a -- a final form. More of a conceptual form, if  
12 you will. And so they weren't in any -- any final  
13 form, but I knew that they could be configured in a  
14 certain way and that's why I put in the report that  
19:18:16 15 there are alternative configurations that could be  
16 created knowing that.

17 MR. BOYNTON: Okay.

18 (Off-the-record discussion between  
19 defense counsel)

19:18:21 20 BY MR. BOYNTON:

21 Q. Okay. I -- I believe you testified  
22 earlier with respect to the original plan and Mr.  
23 Mor -- Dr. Morrison's rebuttal to your original plan  
24 that his challenge of the Maptitude disaggregation  
19:19:01 25 process using the IPF --

1 A. IPF, yes. I think that's --

2 Q. -- process instead validated -- the  
3 results of his work validated your work?

4 A. Correct.

19:19:12 5 Q. Is it equally true that the results of  
6 your work validated his numbers?

7 A. Insofar as the disaggregation; is that  
8 what you're speaking of?

9 Q. Yes.

19:19:22 10 A. Yes, both of them tend to validate each  
11 other.

12 Q. And so you have a range of possible  
13 outcomes between his numbers under the IPF and your  
14 numbers under the -- under the Maptitude  
19:19:37 15 disaggregation process?

16 A. I don't know if it's a range of possible  
17 outcomes. I would say that the Maptitude would be  
18 more accurate. So I would lean in that direction.

19 So -- -

19:19:48 20 Q. And -- and your experience with IPF is  
21 what?

22 A. I -- I -- one of the things that --  
23 well, one -- my experience with IPF is is I have  
24 never used it. I've never developed plans in it.

19:20:03 25 But in -- in reading something about it it does seem

1 as though the two processes are very similar because  
2 of the weighting and the weighting -- basically if  
3 you're using the same weighting scheme, and that's  
4 why they came up with basically virtually the same  
19: 20: 27 5 answer.

6 The second thing is I also looked at the  
7 purely disaggregated process, and that was in my  
8 response report. So that's actually a third  
9 analysis.

19: 20: 41 10 So you have the purely disaggregation,  
11 you have the Maptitude, and then you have  
12 Morrison's. And so the -- the difference between  
13 the third -- the third one, which is the purely  
14 disaggregation, it -- it's closer to the Maptitude.

19: 20: 58 15 Q. Now, explain to me -- and I don't want  
16 to spend --

17 A. Uh-huh.

18 Q. -- a ton of time on this, especially at  
19 this tender hour -- what is the pure disaggregation  
19: 21: 05 20 process?

21 A. So -- so when I determine the error  
22 associated with the largest populated block I -- I  
23 determine it by doing a straight weighted  
24 disaggregation. And so that just means that I  
19: 21: 21 25 didn't care whether you had fractional people. So,

1 you know, whether the weight ended up being 4.5  
2 persons there in the block I didn't care.

3 Q. You left it in fraction form?

4 A. Left it in fraction forms.

19: 21: 36 5 Q. Got it.

6 A. So I disaggregated that and then  
7 compared it to the Maptitude. And both of them came  
8 out to be virtually the same.

9 So you have two different processes that  
19: 21: 46 10 actually come out to be virtually the same, and then  
11 you have Peter Morrison's process.

12 MR. BOYNTON: Give me two minutes. I  
13 think maybe we're totally done. Can we go off?

14 MR. HEBERT: We'll stipulate to two  
19: 22: 11 15 minutes.

16 MR. BOYNTON: Okay. Yeah. Because  
17 you'll restrict yourself to that in all future  
18 depositions, right?

19 MR. HEBERT: I'll restrict you to two  
19: 22: 16 20 minutes.

21 MR. BOYNTON: I'm -- very kind of you.

22 THE VIDEOGRAPHER: Can I go off the  
23 video?

24 MR. BOYNTON: Yes.

19: 22: 41 25 THE VIDEOGRAPHER: Off record at 7:21

1 p.m.

2 (Off-the-record discussion)

3 MS. HARLESS: Can I just put on the  
4 record that he's going to retain the right to read  
19: 24: 27 5 and sign?

6 MR. BOYNTON: Sure. I -- I was going to  
7 tell him publicly that I was done --

8 MS. HARLESS: Oh, that's fine.

9 MR. BOYNTON: -- asking questions,  
19: 24: 29 10 but --

11 THE VIDEOGRAPHER: Stand by real quick.

12 We are back on record at 7:23 p.m.

13 MR. BOYNTON: Mr. Fairfax, I have no  
14 further questions for you today. Thank you for your  
19: 24: 42 15 time.

16 THE DEPONENT: Thank you.

17 MS. HARLESS: And Mr. Fairfax is going  
18 to retain the right to read and sign the transcript.

19 MR. BOYNTON: All right. And --

19: 24: 49 20 THE VIDEOGRAPHER: This concludes the  
21 deposition. We're off record at 7:23 p.m.

22 (Signature not waived)

23 (The deposition concluded at 7:24 p.m.)

24

25

1 DEPOSITION ERRATA SHEET  
2

3 Case Caption: Latasha Holloway, et al. v. City of  
4 Virginia Beach, et al.

5 Deponent: Anthony E. Fairfax

6 Deposition Date: September 24, 2019

7 I have read the entire transcript of my  
8 deposition taken in the captioned matter or the same  
9 has been read to me. I request that the following  
10 changes be entered upon the record for the reasons  
indicated. I have signed my name to the Errata  
Sheet and the appropriate Certificate and request  
both to be attached to the original transcript.

11 Page/Line Nos. Correction/Reason  
12 \_\_\_\_\_

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24 Signature: \_\_\_\_\_ Date: \_\_\_\_\_

ANTHONY E. FAIRFAX

1 CERTIFICATE OF DEPONENT

2 COMMONWEALTH OF VIRGINIA  
3 CITY OF \_\_\_\_\_

4 Before me, this day, personally appeared ANTHONY  
5 E. FAIRFAX, who, being duly sworn, states that the  
6 foregoing transcript of this deposition, taken in  
the matter, on the date and at the place set out on  
the title page hereof, constitutes a true and  
complete transcript of said deposition.

7  
8  
9 ANTHONY E. FAIRFAX

10  
11 SUBSCRIBED and SWORN to before me this \_\_\_\_\_  
12 day of \_\_\_\_\_, 2019, in the jurisdiction  
aforesaid.

13  
14  
15 My Commission Expires

16 Notary Public

21  
22  
23  
24  
25

1 COMMONWEALTH OF VIRGINIA AT LARGE, to wit:

2 I, Kathleen Beard Adams, CCR, RPR, CRR, a  
3 Notary Public for the Commonwealth of Virginia at  
4 large, of qualification in the Circuit Court of the  
5 City of Virginia Beach, Virginia, and whose  
6 commission expires August 31, 2018, do hereby  
7 certify that the within named deponent, ANTHONY E.  
8 FAIRFAX, appeared before me at Virginia Beach,  
9 Virginia, as hereinbefore set forth, and after being  
first duly sworn by me, was thereupon examined upon  
his oath by counsel for the respective parties; that  
his examination was recorded in Stenotype by me and  
reduced to computer printout under my direction; and  
that the foregoing constitutes, to the best of my  
ability, a true, accurate, and complete transcript  
of such examination.

10 I further certify that I am not related to  
11 nor otherwise associated with any counsel or party  
to this proceeding, nor otherwise interested in the  
event thereof.

12 Given under my hand and notarial seal this  
13 2nd day of October, 2019.

14

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16 Notary Public  
17 Certified Court Reporter No. 0313086  
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